
**COMMENTS TO US EPA CONCERNING OBJECTIONS TO THE US STEEL NPDES PERMIT**

Erin Crofton – Resource Specialist

Thank you for the opportunity to submit additional comments on the proposed NPDES permit for US Steel. Save the Dunes Council has worked for years to reduce pollution in Northwest Indiana and to improve water quality in the Grand Calumet River and Lake Michigan. We recently helped organize the Lake Michigan Environmental Coalition made up of 12 environmental organizations to enhance our ability to reach these goals. This draft permit does not appear to reduce pollution or improve water quality. Although we believe both the Indiana Department of Environmental Management and US Steel put forth a good effort on this permit, it still needs to be strengthened. We will reference and submit copies of our comments submitted in 2003 and 2007 to IDEM. Many of the objections raised by EPA were also raised as issues by Save the Dunes. However, there are additional issues that have not been addressed and I will only mention a few here.

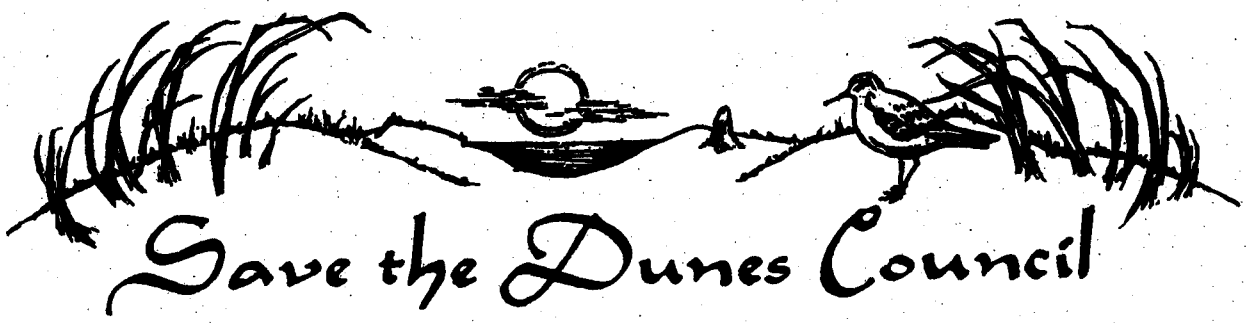
Save the Dunes has urged for a lower cyanide level to protect salmonids present in the Grand Calumet River. We support the lower limit for cyanide year-round and urge reductions be made as required by The Clean Water Act, which protects waters by preventing increases of contaminates that a water body is impaired for, under Section 303. The Grand Calumet River is listed as impaired for cyanide on the 303(d) list. This draft permit allows cyanide to increase by 3.8%. It is not clear to us why an antidegredation demonstration has not been submitted or required. Other concerns with our Indiana antideg processes were brought up with the recently released Barnes report reviewing the BP permit. Clarification of this process is indeed needed.

Because the river is listed as impaired for a variety of pollutants, the state is required to develop a Total Maximum Daily Load for those pollutants that exceed water quality standards. What is the status of the required TMDLs and how can IDEM issue a NPDES permit on impaired segments without the data to show what reductions are needed from point sources to comply with Indiana law? In addition, Save the Dunes participated in the development of the Mercury TMDL for the Grand Calumet River, which has been on hold for years. What is the status of that TMDL and why has there been no action? We understand over $ 1,000,000 was spent on it and this should be finished to help protect the environment and public health from additional impacts to fish from mercury.

Last but not least, Save the Dunes Council supports continuous temperature monitoring at the outfalls on the Grand Calumet River and the one into Lake Michigan as proposed. However, we want to see action to reduce the thermal impact. A study completed by Thomas Simon and Paul Stewart titled "Implications of Chinook Salmon Presence on Water Quality Standards in a Great Lakes Area of Concern" concluded that the previous absence of salmonids in the Grand Calumet River may actually have been a result of discharge temperatures associated with point sources than for any other reason. If this were a new industrial plant would cooling towers be required to address the huge thermal impact of the facility?

Save the Dunes recognizes that US Steel has made several improvements and upgrades to their facility on their own and are the only ones who have done their part in dredging the toxic sediments from the Grand Calumet River. We hope that US Steel continues to do their part to continuously reduce water pollution and that this permit will reinforce this reduction.

**Thank you**

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# COMMENTS OF SAVE THE DUNES COUNCIL
# DRAFT NPDES PERMIT IN 0000281 FOR US STEEL GARY WORKS

## SEPTEMBER 28, 2007

Save the Dunes Council supports protecting Lake Michigan as an Outstanding State Resource Water, without degradation. We have also worked for years to protect and restore the Grand Calumet River from its headwaters in Marquette Park to Lake Michigan, serving on the Citizens Advisory to Remediate the Environment (CARE) Committee for the past 10 years. We have completed a sub watershed plan for the Grand Calumet Lagoons in 1998 and continue to work on projects with the City of Gary to implement that plan. Our members use the Grand Calumet River Lagoons for boating, fishing and recreation. Our members also use Lake Michigan for drinking water, fishing, boating, and other recreation purposes.

In addition, Save the Dunes Conservation Fund, our non-lobbying, educational arm, owns property along the Grand Calumet River, just west of Cline Avenue in Hammond along the "Dupont Reach" of the Grand Calumet River. We have direct impact from the discharge from US Steel and are impacted indirectly through the sediments deposited along this reach.

Save the Dunes submitted comments on this draft NPDES permit in 2003 (Attachment 1). Many of these same issues remain. Save the Dunes comments focus on the following areas:

1) Impaired waters status
2) Cyanide, including site specific cyanide criteria
3) Oil & Grease
4) Mercury
5) Total Suspending Solids (TSS)
6) Temperature/Thermal impacts
7) Grand Calumet River Total Daily Maximum Load (TMDL)
8) Stormwater contribution
9) Monitoring requirements
10) WQBELs
11) Sediment quality - Grand Calumet River
12) Grand Calumet River Lagoons
13) Whole Effluent Toxicity Testing (WETT)
14) Water treatment additives
15) "Daylighting" the Grand Calumet River
16) Compliance schedule
17) Visible Oil

In addition to these specific issues, Save the Dunes urges the agency to provide more outreach and information early in the NPDES permitting process to help the public understand these complicated permitting issues. We also request that the agency provide a better understanding of the overall impact of a permit on the environment. For example, with the US Steel permit it is hard to determine how much of a given pollutant is being discharged due to the multiple discharge points and changing internal outfalls. Are things getting better or worse? Are they discharging more of any regulated pollutant? What is the trend in water quality on the receiving waters?

According to IDEM, over $500,000,000 has been spent on cleanup efforts in the Grand Calumet River. Save the Dunes Conservation Fund has led several projects to protect and restore the headwaters at the Grand Calumet River Lagoons. The agency has also compiled a list of over 270 individual projects and efforts in the Grand Calumet River Area of Concern (Attachment 2).

Save the Dunes is concerned that projects to restore the river are not negated by this and other future discharges. Since many of the pollutants discharged into the river are the same as pollutants that exceed Indiana Water Quality Standards, we challenge the agency to show how this permit will help the river comply with the Clean Water Act (CWA).

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1) Impaired Waters 303(d) Listing - In our 2003 comments, Save the Dunes raised concerns about the impairments to the river. According to the 2006 IDEM 303(d) list, the Grand Calumet River continues to be listed as impaired for Ammonia, Cyanide, Oil and Grease, E. coli, and Impaired Biotic Communities. In addition, the waters are listed for FCA for Hg and for PCBs. We do not see these facts contained in the information on the permit and request this information be included in any decision by IDEM. In addition, we request IDEM provide a timetable to show when the Grand Calumet River will meet Indiana's water quality standards as required by the Clean Water Act.

2) Free Cyanide - This pollutant has the reasonable potential to exceed the water quality based effluent guidelines. In 1998, IDEM granted US Steel's request for a site-specific cyanide criteria. The issue of the presence was debated at that time. Save the Dunes Council is encouraged to see the agency and the company now admit that salmonids are present in the Grand Calumet River, something United States Fish and Wildlife Service reported in 1994. The presence of salmonids requires a lower limit for cyanide, something we strongly support. We do not support weakening that level during part of the year and use the reference cited by IDEM to support our position. "Implications of Chinook Salmon Presence on Water Quality Standards in a Great Lakes Area of Concern" by Thomas P. Simon, Paul M. Stewart, et.al., identifies the presence of salmonids in the Grand Calumet River and attribute that to the improved water quality from reduced surface water toxins from effluent since 1986 and increased dissolved oxygen since 1990. However, they conclude that: "The previous absence of salmonids in the Grand Calumet River may actually have been a result of discharge temperatures associated with point sources than any other reason", page 135, 2004 Proceedings of the Indiana Academy of Science 113(2): 133-139, Simon, et. al. We support the lower limit for cyanide year-round and urge reductions be required to meet Indiana water quality standards

for cyanide as required by the Clean Water Act. In addition we raise the idea that the high temperatures are the cause of the absence of salmonids during parts of the year one would expect them to be present. Therefore, we cannot support a higher level for cyanide if other pollutants, such as temperature, are the cause. See our comments on Temperature/Thermal impacts. To do that would be like saying if you pollute the water enough so nothing lives, you don't have to protect aquatic life.

We want IDEM to pay special attention to the coke oven area, especially for benzo(a)pyrene, TSS and cyanide, and to require reductions over time. Outfall 0501, which includes the coke oven and landfill leachate discharges are cause for concern. Although limited by New Source Performance Standards, the discharge of cyanide is 27 pounds per day and TSS is 706 pounds average. These huge discharges must be reduced and we urge IDEM develop a plan to address this source.

3) Oil and Grease - We support the reduction of Oil & Grease and urge an even more aggressive program to detect leaks, spill detection and notification. We would request you to calculate the volume of oil and grease allowed by the proposed permit and the amounts estimated to be discharged by US Steel. How do the contributions from non-point sources (stormwater) enter the calculations and limits?

4) Mercury - Mercury is a neurotoxin and considered a bioaccumulating chemical of concern (BCC). The limit under Indiana's Great Lakes Initiative rules is 1.3 parts per trillion (ppt). The discharge from Outfall 005 and 010 exhibit a RPE based on very limited sampling. While 2 of the intake samples exceed Indiana's WQS for Hg, 2 do not, according to the EPA Method 1631 Mercury Ambient data, updated April 9, 2003. In fact, at only one location, USS Gary Works Lake Michigan Intake 2, does the mean exceed the standard. The mean at that intake is 1.409 ng/l. RPE for Hg is identified at several outfalls. Outfall 020 seems to have the highest sampled values for Hg at 6.15 ng/l, obtained during Hg sampling for the Grand Calumet River TMDL for Hg. We understand that no mercury variance can be issued by IDEM unless the facility has a current NPDES permit. Save the Dunes also knows that US Steel has an aggressive mercury reduction program, which we strongly support.

However, due to the fact that mercury is a BCC and there are other substantial unregulated sources of mercury such as coke ovens, at the facility, we urge IDEM to require a multimedia mercury reduction program that includes reducing mercury from all sources. We know a Mercury Pollution Prevention Management Plan would help and should be required. A mass balance study looking for all sources, including air emissions should be required.

We also point out that over $ 1,000,000 has been spent on the Grand Calumet River TMDL which was placed 'on hold' and never completed. This TMDL must be completed and to do otherwise would waste a considerable amount of public and private money. Finally, we ask IDEM to provide an estimate of the total mass of mercury that is currently discharged to surface water so the public has a perspective of the contributions from this source as compared with others.

5) Total Suspended Solids (TSS) - Save the Dunes continues to have concerns about TSS and the contributions of TSS to the build-up of sediments in the Grand Calumet River and Indiana

Harbor Ship Canal. It is estimated as much as 200,000 yards of highly contaminated sediments are released into Lake Michigan from the river and ship canal. As much as 100,000 pounds of lead, 67,000 pounds of chromium and 420 pounds of PCBs are discharged into Lake Michigan from these sediments, one of the leading contributors to pollution of Lake Michigan and the Great Lakes. It is important to minimize the discharge of solid waste into the Great Lakes system. Stormwater also contributes sediment to the discharge, and that must be addressed and reduced.

6) Temperature/Thermal Impacts - The federal CWA at §316(a) requires demonstration to assure that effluent limitations protect aquatic resources, including propagation. The thermal impact from the US Steel discharge exhibits RPE at Outfall 005. The IDEM fact sheet states that the data for Outfall 005 shows the discharge causes excursions (violations?) of the water quality criteria for temperature. However, we do not find a §316(a) demonstration for the discharge as required by the CWA. While there is some information about the monitoring site location, we find nothing about the requirements to reduce the impact by reducing thermal impact. We request US Steel be required to perform an updated §316(a) demonstration that meets the requirement of the law, based on current conditions and flows.

Save the Dunes does support continuous temperature monitoring at the Outfalls on the Grand Calumet River and the one into Lake Michigan as proposed. It will determine the impact on aquatic resources. However, we want to see action to reduce the thermal impact. If this were a new plant, would cooling towers be required to address the huge thermal impact of this facility?

7) Grand Calumet River Total Daily Maximum Load (TMDL) - Because the river is listed as impaired for a variety of pollutants, the state is required to develop a Total Maximum Daily Load for those pollutants that exceed water quality standards. What is the status of the required TMDLs and how can IDEM issue an NPDES permit on impaired segments without the data to show what reductions are needed from point sources to comply with Indiana law? In addition, Save the Dunes participated in the development of the Mercury TMDL for the Grand Calumet River which has been on hold for years. What is the status of that TMDL and why has there been no action? We understand over $ 1,000,000 was spent on it and this should be finished to help protect the environment and public health from additional impacts to fish from mercury.

In addition, a new Waste Load Allocation (WLA) should be required for the waterway. All dischargers should be required to reduce their free cyanide limit to reflect the presence of salmonids. We think the ammonia limits would also be lowered as a result of a new WLA.

8) Stormwater Contribution - Save the Dunes is very concerned about the stormwater impacts to Lake Michigan and the Grand Calumet River from stormwater. We understand there is a Stormwater Pollution Prevention Plan, but do not find information about the impact of the plan now being implemented. We are especially concerned about the current requirements relating to stormwater that are in the current permit and ask for compliance data from IDEM on the issue. We are especially concerned about stormwater near the coke plant due to contaminants, especially PAHs. We request IDEM be more aggressive on requiring reductions and treatment of stormwater from this facility and not allow untreated, polluted runoff from this industrial facility to enter waters of the United States. There are many Best Management Practices (BMPs) that could be included in management of their runoff, such as vegetated swales.

9) Monitoring Requirements - We oppose reducing monitoring requirements at Internal Outfall 00502 and think it should stay in place.

10) WQBELs - We urge IDEM to make this section easier to understand for the public and others. We support monitoring for flow, as that will help in future management.

11) Sediment Quality in the Grand Calumet River - This is an issue that has plagued the Grand Calumet River for generations. Designated as an International Area of Concern by EPA and the International Joint Commission (IJC), IDEM established the Citizens Advisory to Remediate the Environment (CARE) Committee to develop the Remedial Action Plan (RAP). One of the documents supporting restoration is the Grand Calumet River - Indiana Harbor Ship Canal Sediment Cleanup and Restoration Alternatives Project (SCRAP) report (September 1997) and is important to consider in any permitting along the Grand Calumet River. More information is found at: http://www.epa.gov/glnpo/arcs/EPA-905-B94-002/B94002-ch1.html

Save the Dunes is a member of the CARE Committee and the impact of this discharge on sediment quality must be considered to assure there will not be recontamination of the sediments. We point out that US Steel has spent millions of dollars dredging highly contaminated sediments as part of an Agreed Order. That project, dredging about 700,000 yards along a 5-mile stretch of the river, is almost complete.

Our concerns are with the huge amount of TSS proposed to be discharged. It is important to continue to reduce the volume of solid waste material dumped into the river, and therefore into Lake Michigan. The Grand Calumet River is identified as the largest contributor of E. coli into Lake Michigan according to the Lake Michigan TMDL for E.coli completed a few years ago. Since there is a relationship between turbidity and high E. coli levels, which can lead to beach closings due to unhealthy levels of bacteria, it is important to reduce these levels.

We find stormwater to be another significant source of TSS and efforts to reduce that should be required.

12) Grand Calumet River Lagoons & Daylighting the River - The Grand Calumet River lagoons are the headwaters of the Grand Calumet River. However, there is significant contamination of the sediment in the far-western lagoon, identified more than 10 years ago and subject of numerous studies and alternatives for clean up. We support those efforts such as the barrel removal that was recently completed. We urge further action to remediate the highly contaminated sediments. Sediments have PAH levels as high as 120,000 ppm, or 12% , according to published studies, which are unacceptable. Fish tissue monitoring has shown significant levels of contaminants described by one researcher as the 'hottest' fish they had ever seen alive. This condition must be remediated.

After sediment remediation, Save the Dunes urges IDEM to require removing the 1,800 feet of the Grand Calumet River that was put in a pipe in 1958. 'Daylighting' the river would accomplish significant restoration of the aquatic habitat and would provide a connection between the lagoons and the rest of the river. A water control structure would probably be required, but proper planning could identify alternatives. Save the Dunes points to the recently

daylighted Dunes Creek as an example of improving water and habitat quality by this technique. Daylighting the river would also show to the public there is nothing to hide underground, and there are no hidden discharge points that were forgotten.

13) Whole Effluent Toxicity Testing (WETT) - Please explain (Tu c) on page 45 of the fact Sheet and how these units were derived. Save the Dunes supports WETT testing and an aggressive program to investigate causes of impact if determined during the testing. We support WETT testing at Outfalls 005 (Chronic), 034 (Chronic), 010, and 028/030. We find the 2000 WETT testing report by Advent confusing since it seems there were impacts at lower levels of effluent. Please explain historic WETT results at the facility and what was done to correct any problems. Save the Dunes also requests the reason EPA did not approve 5-2-11.5(c)(1) which then required IDEM to use 40 CFR Part 132. What is the one exception identified in the Fact Sheet?

14) Water Treatment Additives - Save the Dunes requests that IDEM explain any potential negative impacts from water additives contained on pages 45-47 of the Fact Sheet and information about the impact of each of these chemicals on water quality.

15) "Daylighting" the Grand Calumet River - Save the Dunes supports IDEM in investigating daylighting the Grand Calumet River. About 1,800 feet of the river was placed in a pipe in 1958 (Attachment 3). There are sediment issues that need to be addressed, but there may be long term benefits to the ecosystem if this connection with the headwaters is reestablished. (See Comment 12)

16) Compliance Schedule - We find the 5-year compliance schedule too long and urge IDEM shorten any compliance schedule to 1 year maximum. Testing and assessment of the data can be done in a much shorter time period to further protect the environment.

17) Visible Oil - Save the Dunes supports the Visible Oil program at US Steel as a way to detect problems with oil and grease contamination earlier than sampling for those parameters. We support other early detection programs, like this one, to alert the company on potential environmental problems before there are water quality violations.

Conclusions
US Steel is the largest steel maker in the nation and produces about 8,000,000 tons per year. The Grand Calumet River has been identified as one of the most contaminated rivers in the nation, due today mainly from the legacy sediments. However, there are hundreds of restoration projects underway and IDEM must protect these projects from negative impacts of additional contamination.

We also understand the need to have a current NPDES permit for facilities, and know the permit backlog has been an issue for some time. We realize having new permits will improve water quality over time as new standards are included in permits.

Save the Dunes urges IDEM to push for further reductions to require compliance with Indiana Water Quality Standards to help the protection and restoration of the Grand Calumet River. We further urge the agency to press for implementation of other Agreed Orders that have been filed

in this area including the Ralston St. Lagoons and the Gary Sanitary District that would require an additional 5 miles of dredging from the railroad bridge (the downstream end of the US Steel dredging project), as well as other activities that support the Remedial Action Plan and cleanup of the Grand Calumet River Area of Concern.

Residents along the river have suffered long enough and IDEM should take a more aggressive lead in solving these long time environmental travesties.

Sincerely,

Thomas R. Anderson, Executive Director
Save the Dunes Council and Save the Dunes Conservation Fund

ATTACHMENT 1


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COMMENTS OF SAVE THE DUNES COUNCIL
DRAFT NPDES PERMIT IN0000281 FOR USS GARY WORKS
October 8, 2003

The Save the Dunes Council appreciates the decision by the Indiana Department of Environmental Management to hold a public hearing on this draft permit to regulate discharges into the Grand Calumet River and Lake Michigan [an outstanding state resource water] from the largest steel manufacturing facility in the United States.

We are especially concerned about the following issues:

1) Impaired waters status [2002 and 2004 draft 303(d) lists]
2) Cyanide, including the revised criteria for free cyanide
3) Oil and grease
4) Mercury
5) TSS
6) Temperature
7) Grand Calumet River TMDL
8) IN0061077 [NPDES Permit for river dredging and facility specific water treatment]

The Grand Calumet River East Branch continues to be listed as impaired for cyanide, and for oil and grease and for impaired biotic communities in the draft 2002 List of Impaired Waters and the just published draft 2004 list. We are not sure that the various limits set in this permit for cyanide and for oil and grease are at levels that will help assure that the affected segments of the East Branch of the Grand Calumet River listed as impaired will now

achieve water quality standards. For example, in many outfalls there are not limits; just a "report" requirement for these pollutants. If not, the limits must be tightened to achieve them.

The East Branch is also listed in both the 2002 and the 2004 draft lists as containing impaired biotic communities. What specific limits or actions proposed in this draft permit are designed to reduce or eliminate this impairment?

The 1994 NPDES permit still in effect contains two studies designed to be implemented following completion of the dredging of the river. Section I.G. provides for long-term, instream biological monitoring for fish and macroinvertebrates following completion of the sediment remediation [dredging] project. Section I.L. is a special condition requiring long term sediment monitoring in the Grand Calumet River at five specific locations within one year after dredging is completion, and at two year intervals hereafter. Since the dredging portion of the project is nearly completion, will this provision be included in the draft permit, or is the existing language in the current, administratively extended permit sufficient to carry over into the new permit?

The site specific aquatic life criteria for free cyanide that were added to the company's previous NPDES permit as a modification in 1997 were based on IDEM's determination that salmonids "do not occur" in the East Branch of the river. Since it has been affirmatively determined that salmonids do exist in the river, what are the new aquatic life criteria for free cyanide in the draft permit and how do they compare with the 1987 limits? Will these new aquatic life criteria for free cyanide limits improve the ability of the discharger to meet cyanide water quality standards? Does existence of salmonids now make the Grand Calumet River a salmonid stream?

The East Branch was listed as impaired for mercury in the draft 2002 list, but removed from the draft 2004 list. We are aware that much sampling has been conducted for intake water from Lake Michigan and in the East Branch of the Calumet River as part of the Grand Calumet River TMDL. We are surprised that the interim limits in the draft permit are "report"only, not more definite limits.

The 1994 NPDES permit, at section I.E. required the company to carry out a chemicals and toxic metals monitoring program which included mercury

among other parameters. This permit also included a reopening clause which allowed IDEM/EPA to reopen the permit to establish discharge limits and monitoring requirements for mercury [as well as the other pollutants included in the list] at any or all of the discharge points contained in the permit. The 1997 amendment [cokemaking facility] also included the new Great Lakes Basin Requirements. Although the approved mercury test method at the time was 245, were any mercury data gathered at all? Did IDEM have the opportunity to set limits on mercury at that time?

The draft permit includes pollution minimization plans to be initiated for several toxic pollutants, but omits mercury. The Council suggests that a pmp also be required for mercury. As I understand the RPE analysis for mercury [1999 and 2001 data] on Table 1 at selected outfalls contained in the draft permit Fact Sheet, potential effluent quality will exceed potential effluent limits. It is reasonable to presume that US Steel will be applying for a variance after this permit is final and a mercury variance rule has been final adopted. This draft permit contains a prescriptive Mercury Schedule of Compliance section at section I.E. which does not appear to anticipate a variance request for mercury.

We are concerned generally about TSS requirements, especially as they may contribute to sediment buildup in the Grand Calumet River in the future. It is not clear to us whether the sediment study at section I.L. Mentioned above was intended to look at sediment quantity or sediment quality. Clarification of its purpose would be appreciated. If its intention is not sediment build up, could either the tightening of TSS requirements or a study of sediment build up or both assist in slowing down sediment build up to delay or prevent the need for another massive dredging project? If so, we request that this be considered for this permit.

We would like to obtain a copy of Attachment II, "Storm Water Discharge Location Map," which was absent in our copy of the draft permit. Storm water is a contributor to nonpoint source pollution, which in turn is also a major factor in biological impairment of the river.

The Council is concerned about temperature and thermal effluent and its effect on aquatic life in the river. We applaud the requirement for continuous temperature monitoring, since we are concerned that these parameters may be partly responsible for the river's status as an impaired biotic community? It is unclear what the new effluent limits will be if they

are not limited to 3 ° over the monthly temperatures in the two Tables.

A Total Maximum Daily Load study has been underway for the East Branch of the Grand Calumet River for over two years. What is the status of this study? Does it include looking at contributions from nonpoint sources?Does IDEM expect that the TMDL as finalized will suggest additional actions that are needed to meet water quality standards?

The draft also contains requirements for fecal coliform and for e-coli? Why is fecal coliform still in the permit, since e-coli has been the water quality standard since 1990?

The Fact Sheet notes that the procedure for determining Whole Effluent Toxicity in IDEM's Great Lakes Basin rules was over promulgated by EPA. It notes that IDEM used the required procedure -- with one exception? What was it and why was it used?

In 2001, IDEM issued a separate NPDES permit for a Project Specific Treatment Plant to United States Steel in connection with its operation of a Passive Dewatering Facility .The Council strongly urges IDEM and US Steel to combine IN0061077 into IN0000281 when the dredging and post dredge analysis are complete since the plant discharges into outfalls covered by the draft permit. We recognize that the PDF permit relies on the "no net addition" exception for mercury, but we understand that this exception expires in 2007, at least one year before the proposed permit would normally expire.

The Council is pleased that this permit includes the latest effluent limit guidelines applicable to this facility and that limits are now stated in both mass and concentration. IDEM has extended the comment period for the company until October 24, 2003. The Council assumes that the extended comment period applies to public comment as well. If not, we hereby request that extension.

Thank you for holding this hearing in Northwest Indiana.

Charlotte J. Read
Assistant Director
SAVE THE DUNES COUNCIL

Docket No. G-636

STATE OF INDIANA

ATTACHMENT 3

## Flood Control and Water Resources Commission

# Certificate Of Approval

# of

# Construction In A Floodway

This certificate is issued to United States Steel Corporation

in accordance with an application dated January 30, 1958, filed by T. W. Hunter, General Superintendent, Gary Steel Works for the construction of a concrete culvert to carry the flow of the upper reach of the Grand Calumet River on , located in secs. 35 and 36, T. 37 N. R. 8 W., in the City of Gary, in Lake County; upon the finding by the Commission that the proposed work will not adversely affect or interfere with flood control in the State. The Commission approves this project, subject to the limitations and conditions specified on the reverse side of this form, provided the project is constructed and maintained in accordance with the plans, specifications, and other data submitted with the application. There shall be no deviation from said plans unless the proposed change in plans shall first have been submitted to and approved in writing by the State of Indiana acting by and through its Flood Control and Water Resources Commission.

Approval Recommended:

J. L. Perry
Chief Engineer

Approved by the Commission:

August 22, 1958

Secretary

**Findings and Recommendations of the Commission on the Reverse Side.**

IFC-13 7-1-52

INDIANA FLOOD CONTROL AND WATER RESOURCES COMMISSION
INDIANAPOLIS, INDIANA

Docket No. G-636 Date July 8, 1958

# ENGINEER'S REPORT

## CONCRETE CULVERT IN THE GRAND CALUMET RIVER AT GARY, INDIANA

Application, Docket G-636, dated January 30, 1958, received April 8, 1958, has been submitted by the United States Steel Corporation for approval of plans to construct and maintain a concrete culvert to carry the flow of the upper reach of the Grand Calumet River.

The project is located in sections 35 and 36, T. 37 N., R. 8 W., in the City of Gary, Lake County, Indiana.

The purpose of the project is to substitute the open channel of the Grand Calumet River by a closed conduit in order to facilitate the utilization of the land owned by the U. S. Steel Corporation east of the existing channel. The proposed conduitm about 1,850 feet in length, will be located within the property boundaries of the Corporation, as the additionally submitted plans, received June 30, 1958, indicate.

The conduit is to be a 5-foot reinforced concrete culvert pipe, laid on a slope of 0.05 percent. The invert elevations of its upstream and downstream ends are to be 4.17 and 3.25 feet, respectively. Two concrete manholes will be constructed: One at the upstream end of the culvert to provide a junction with the existing two 3-foot culverts under the railroad tracks, and the other about 650 feet downstream where the culvert will change its direction.

The outlet will be equipped with a retaining wall, wingwalls, and an apron 7 feet in length. The plans indicate the existing river downstream from the culvert outlet is to be dredged for a distance of about 1,420 feet. The upstream portion of the river, which will be substituted by the proposed culvert, is to be filled to the final grade for the area.

The drainage area above the proposed culvert is very small, consisting of sand dunes and marshy land. The head waters of the Grand Calumet River are formed by a lagoon separated from Lake Michigan by high sand dunes.

On November 9, 1954 engineers of the U. S. Geological Survey measured 52.2 cubic feet per second at a point downstream from two coke plant sewers. On May 19, 1955, engineers of the Geological Survey and the Commission measured 31.3 cubic feet per second, below the upper sewer. No measurable flow was detected above the upper sewer on that date. Therefore, it appears that substantially all the flow in the Grand Calumet River, on the dates above when the river was high, came from sewers entering below the location of the proposed conduit.

It appears that the capacity of the proposed structure, which will be about 50 cubic feet per second, will be adequate to accommodate any flow that reasonably may be expected to occur from the drainage areas as discussed above.

A. Lidums
Engineer

RECOMMENDATION:

The proposed culvert appears adequate to pass any reasonably expected flow.

The project will not unduly restrict the capacity of nor adversely affect the efficiency of the floodway.

It is recommended that the application be approved.

Max Noecker

Max Noecker
Principal Engineer

# APPLICATION TO APPROVAL OF CONSTRUCTION IN A FLOODWAY

Gary, Ind.

January 30, 1958

TO:

Indiana Flood Control and Water Resources Commission
377 Board of Health Building
1330 West Michigan Street
Indianapolis 2, Indiana

Indiana Flood Control & Water Res. Comm.
Date April 8, 1958
Docket No. G-636

In compliance with the provisions of the Flood Control Act, Chapter 318 of the Acts of 1945 (Section 27-1117, Burns 1938 R. S., Supp.), of which Section 17 makes provision for prior approval by the Indiana Flood Control and Water Resources Commission of the construction of any structure, obstruction, deposit or excavation in a floodway, and Section 19 requires approval of any works for flood control,

UNITED STATES STEEL CORPORATION
(Here state name of person or persons, partnership, association, corporation, county, city, town, or township.)
Gary Steel Works

hereby makes application for approval by the Indiana Flood Control and Water Resources Commission to establish, to construct, or to maintain a five foot (5') diameter concrete culvert approximately
(Here describe type of construction—bridge, dam, levee, excavation, etc.)
one thousand eight hundred fifty feet (1850') long.

in or on The Grand Calumet River
(Here state name of stream.)

at a point where the Grand Calumet River Lagoon forms the river in fractional sections
(Here give location, by distance from mouth of stream or from county, township, or municipal
thirty-five (35) and thirty-six (36), Township Thirty-Seven North (T37N) Range Eight
boundary; also give section, township, range, city or town, and county in which located.)
West (R8W) of the Second Principal Meridian (2 P.M.), City of Gary, Lake County

for the purpose of filling a portion of the river that flows through the Gary Steel Works
(Here state fully the purpose, necessity, and description of the proposed construction.)
Coke Plant to grade so as to enable that portion of land now containing the river and that portion of land isolated from the main plant by the river to be used as a railroad yard and coal storage yard.

in accordance with the maps, plans, profiles, and specifications filed with this application and made a part hereof.

T. W. Hunter

General Superintendent

Gary Steel Works

(Address) Gary,

Indiana

Enclosures (List plans, profiles, specifications and other data submitted with application and made a part thereof.)

Gary Steel Works Drawings 81153, 81154, 67621, and C.E.S.-1134.

STATE OF Indiana }
COUNTY OF Lake } ss:

On this 6th day of February, 1958, before me, a Notary Public in and for said county and state, personally appeared T. W. Hunter o being by me duly sworn does acknowledge that the facts set out in this "Application For Approval of Construction in a Floodway" are true.

David Klein
Notary Public

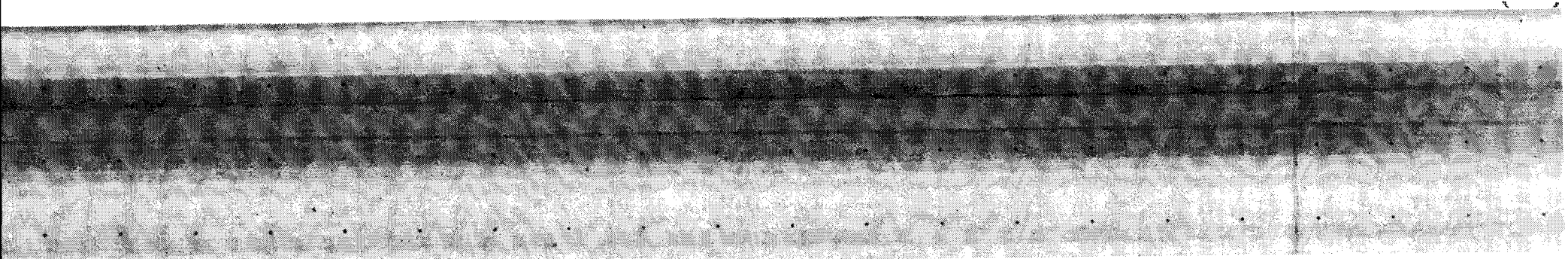
My commission expires August 23, 1961

ATTACHMENT 2

| RAP | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | Amoco Cleaning and Stabilization Project | BP- Whiting | Dave Kalet | Complete | | | 2815 Indianapolis Blvd. | Whiting | IN | 46394 | |
| 2 | new | Assembly and Synthesis of Draft Regional Biodiversity Recovery Plan for NE Illinois | NIPC | | | | | | | | | |
| 3 | new | Biological And Ecotoxicological in Estuaries | USGS | | | | | | | | | |
| 4 | | Clean Cities Program | US DOE | Debra Mc Clelland-Parker | Complete | | dmcpark@netnitco.net | 6828 Leland Avenue | Hammond | IN | 46323 | |
| 5 | new | Delta Institute Gary Riverfront Revival: A Model Development Plan | Delta Institute | | | | | | | | | |
| 6 | New | Development of Biological Indicator of PAH | | | Complete | | | | | | | |
| 7 | new | Field Validation of Long-Term Toxicity Tests | USGS | | | | | | | | | |
| 8 | new | Grand Cal Task Force | Grand Cal Task Force | No Contact | Complete | | | | | | | |
| 9 | new | Grand Calumet River AOC Biodiversity Education Project | Grand Cal Task Force | No Contact | Complete | | | | | | | |
| 10 | | Grand Calumet River Lagoon Erosion Control Demontration | Save the Dunes | Tom Anderson | Complete | | std@savedunes.org | 444 Barker Road | Michigan City | IN | 46360 | |
| 11 | new | Hammond Brownfield Project (1996) | City of Hammond | Ron Novack | | | | | | | | |
| 12 | new | Hammond Brownfield Project (1999) | City of Hammond | Ron Novack | | | | | | | | http://www.epa.gov/region5/superfund/ecology/html/casestudies/housejunk.htm |
| 13 | new | House's Junk Yard | EPA | | | | | | | | | |
| 14 | new | Hydrology and Geochemistry of a Slag-Affected Aquifer | USGS | | | | | | | | | |
| 15 | new | Indiana Harbor Canal Study | USGS | | | | | | | | | |
| 16 | | Inland Steel Sediment Characterization Study in the IHSC | ISPAT/Inland | John Fekete | Complete | | jdfeke@inland.com | 3210 Watling St. | East Chicago | IN | 46312 | |
| 17 | new | Little Calumet River Prairie and Wetland | IUN | | | | | | | | | |
| 18 | new | LTV Steel | | Christine Liszewski | Complete | | liszewski.christine@epa.gov, | | | | | |
| 19 | new | Marquette Lagoon Watershed Plan | Save the Dunes | Sandra Wilmore | Ongoing | | sandi@savedunes.org | 444 Barker Road | Michigan City | IN | 46360 | |
| 20 | new | Mercury Methalation Study | University of Illinois | Bob Hudson | Ongoing | | rjhudson@uiuc.edu | 1102 South Goodwin Avenue, S-518 Turner Hall, MC-047 | Urbana | IL | 61801 | http://www.lrc.usace.army.mil/projects/Whiting107%20FY05.htm |
| 21 | new | Monitoring Avian Migration, Productivity, and Survivorship in Northwest Indiana | Save the Dunes | Sandra Wilmore | Complete | | | 444 Barker Road | Michigan City | IN | 46360 | |
| 22 | new | Northwest Indiana Cities - Brownfields Assessment Pilot (1996) | IDEM | | | | | | | | | |
| 23 | | Roxanna Marsh in East Chicago | Lake Co. SWCD | Phyllis Reeder | Completed | 219.663.0588 ext. 3 | phyllis-reeder@iaswcd.org | 928 S. Court Street, Suite C | Crown Point | IN | 46307 | |
| 24 | | Sediment Cleanup Restoration Alternative Project (SCRAP) | IDEM | Steve West | Complete | 317-233-8905 | swest@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | |

| RAP | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | | Soil and Water Conservation District (SWCD) Programs | Lake Co. SWCD | Phyllis Reeder | Completed | 219.663.0588 ext. 3 | phyllis-reeder@iaswcd.org | 928 S. Court Street, Suite C | Crown Point | IN | 46307 | | |
| 26 | new | Suspended Sediment in Indiana Harbor | USGS | | | | | | | | | | |
| 27 | new | The Corridor Vision Project | Delta Institute | T.J. Holsen | Complete | | tjholsen@delta-institute.org | 53 W. Jackson Blvd., Suite 230 | Chicago | IL | 60604 | | |
| 28 | | The East Shore of Wolf Lake in Hammond | Lake Co. SWCD | Phyllis Reeder | Completed | 219.663.0588 ext. 3 | phyllis-reeder@iaswcd.org | 928 S. Court Street, Suite C | Crown Point | IN | 46307 | | |
| 29 | | The Lost Marsh Restoration | BP- Whiting | Dave Kalet | Ongoing | | | 2816 Indianapolis Blvd. | Whiting | IN | 46394 | | |
| 30 | new | The Native Revegetation of Steel Slag Project | HSD | Mike Unger, Ph.D. | Complete | | webmaster@hmdin.com | 5143 Columbia Ave. | Hammond | IN | 46327 | | |
| 31 | | The Native Revegetation of Steel Slag Project | Inland & HSD | John Fekete | Complete | | jdfeke@inland.com | 3210 Watling St. | East Chicago | IN | 46312 | | |
| 32 | | The South bank of the Grand Calumet River in Gary, Ambridge/ Mann area | Lake Co. SWCD | Phyllis Reeder | Completed | 219.663.0588 ext. 3 | phyllis-reeder@iaswcd.org | 928 S. Court Street, Suite C | Crown Point | IN | 46307 | | |
| 33 | | U.S. EPA Advanced Identification of Sites (ADID) Program | USEPA | Catherine Garra, Wetlands Scientist | Completed | | garra.catherine@epa.gov | 77 W. Jackson Blvd. | Chicago | IL | 60604 | Reggie Korthals | http://www.lrc.usace.army.mil/projects/Whiting107%20FY05.htm |
| 34 | | U.S. Steel (sediment, water, RCRA decree) | US Steel | David Behrens | Complete | | DCBehrens@uss.com | 1 N Broadway | Gary | IN | 46402 | | |
| 35 | | United States Steel Corporation (U.S. Steel) | US Steel | David Behrens | Complete | | DCBehrens@uss.com | 1 N Broadway | Gary | IN | 46402 | | |
| 36 | new | Whihala Beach Dune Restoration | Lake Co. Parks Dept. | | | | | | | | | | http://www.epa.gov/glnpo/fund/status/whihala.html |
| 37 | new | Wolf-Lake Bi-State Meetings | Calumet Ecological Park Association | Karen Rodreguiz | Complete | | rodriguez.karen@epa.gov | | | | | | |
| 38 | new | East Chicago Public Transit Diesel Bus Refits | City of East Chicago | | | | | | | | | | |
| 39 | new | Marquette Park Enhancement Project | Save the Dunes | Tom Anderson | | | | 444 Barker Road | Michigan City | IN | 46360 | | |
| 40 | new | Aeration System Improvements Project | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 41 | | Amoco Agreed Order | BP-Whiting | Dave Kalet | Ongoing | | | 2816 Indianapolis Blvd. | Whiting | IN | 46394 | | |
| 42 | new | Baseball Stadium Storm Water Drainage Project | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 43 | new | Bioremediation Demonstration Project | City of Hammond | Ron Novack | | | | | | | | | |
| 44 | new | BP Air Consent Decree | BP-Whiting | | | | | | | | | | |
| 45 | | BP/Amoco loading dock | IDEM | Ryan Groves | Ongoing | | rgroves@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 46 | new | BP/Amoco Whiting Refinery | IDEM | Chris Myer | | | | | | | | | http://www.wildlifehc.org/indiana/ |
| 47 | new | Brownfield MOU between EPA and IDEM | FORUM | Kay Nelson | Complete | 312-886-7567 | knelson@jorsm.com | 8989 Columbia Ave. | St. John | IN | 46373 | | |
| 48 | new | Brownfield Redevelopment at Buffington Harbor | City of Gary | Doreen Carey | Ongoing | | dcarey@ci.gary.in.us | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 49 | new | Brownfields - Greenfields Policy Roundtable | GLC | Victoria Peeples | Complete | | vpebbles@glc.org | 2805 S. Industrial Hwy, Suite 100 | Ann Arbor | MI | 48104-6791 | | http://www.glc.org/landuse/inroundtable/ |
| 50 | new | Calumet Containers | EPA | Vernita Simon | Complete | | simon.vernita@epa.gov | 77 W. Jackson Blvd. | Chicago | IL | 60604 | | |
| 51 | new | Central Area Relief Sewer Rehabilitation Project | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |

| RAP | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 52 | new | Chicago Regional Biodiversity Atlas | TNC | | | | | | | | | | |
| 53 | new | Clark and Pine East (Bongi) Dune and Swale Community Restoration | IDNR | Nick Hienzelman | Ongoing | | Nheizelma@dnr.IN.gov | | | | | | |
| 54 | | Coastal Coordination Project | IDNR | Mike Molnar | Ongoing | | mmolnar@in.gov | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | |
| 55 | new | Coastal Grants Program | IDNR | Mike Molnar | Ongoing | | mmolnar@in.gov | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | |
| 56 | new | Coastal nonpoint Source Pollution Control Plan (6217) | IDNR | Mike Molnar | Ongoing | | mmolnar@in.gov | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | |
| 57 | new | Compiling Site Specific Information for Imperiled Species | TNC | | | | | | | | | | |
| 58 | | Coordinated Resource Management Process | IDEM | Eric Oliver | | | eoliver@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | 9/15/2005 | |
| 59 | | Dredge Sediments Disposal | IDEM/USEPA | Steve West | Ongoing | | swest@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 60 | new | East Chicago Sediment Remediation Demonstration Project | USACE | Kirston Buczak | Ongoing | | Kirston.A.Buczak@lrc02.usace.army.mil | | Chicago | IL | 60606-7206 | | |
| 61 | new | ECI - State Cleanup | IDEM | Ryan Groves | Ongoing | | rgroves@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 62 | new | Ecologically Rich Areas - Critical Ecosystem Team | | | | | | | | | | | http://www.epa.gov/glnpo/ecopage/R5/era/IN-areas.html |
| 63 | new | EPA and IDEM MOU | | | | | | | | | | | |
| 64 | new | Federal Consistency | IDNR | Mike Molnar | Ongoing | | mmolnar@in.gov | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | |
| 65 | new | Fen and Sedge Meadow Restoration and Maintenance | USEPA | Marc Tuchman | Ongoing | (312) 353-1369 | tuchman.marc@epa.gov | 77 W. Jackson Blvd. | Chicago | IL | 60605 | GL2002-114 | |
| 66 | new | Filter Building Screen and Cell Rehabilitation Projects | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 67 | new | Gary Airport and Surrounding Sites | IDEM | Ryan Groves | Ongoing | | rgroves@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 68 | new | Gary Brownfields Assessment Pilot (2000) | City of Gary | | | | | | | | | | |
| 69 | new | Gary Brownfields Jobs Training and Development (2001) | City of Gary | | | | | | | | | | |
| 70 | new | Gary Brownfields Project (2003) | City of Gary | Mary Mulligan | Ongoing | 219-882-3000 | mmulligan@ci.gary.in.us | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 71 | new | Gary Green Link | City of Gary | Dorreen Carey | Ongoing | 219-882-3000 | dcarey@ci.gary.in.us | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 72 | new | Gary Green Link | IDNR | | | | | | | | | | |
| 73 | new | Gary Headworks Project - Design | USACE | Imad Samara | Ongoing | | Imad.Samara@usace.army.mil. | | Chicago | IL | 60606-7206 | | |
| 74 | | Gary Sanitary District (GSD) | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 75 | new | Gary Sanitary District Consent Decree | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 76 | new | Gary/ Chicago Airport Environmental Impact Statement | | Paul Karas | Ongoing | 219-949-4902 | pkaras@219.com | 6001 W. Industrial Highway | Gary | IN | 46406 | | |
| 77 | new | Gary/ Chicago Airport Expansion Projects | | Paul Karas | Ongoing | 219-949-4903 | pkaras@219.com | 6002 W. Industrial Highway | Gary | IN | 46406 | | |



| RAP | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | http://www.state.in.us/nrc_dnr/lakemichigan/ |
| 78 | new | GATX | IDEM | Chris Myer | | | | | | | | | |
| 79 | new | Gibson Woods Nature Preserve Acquisition | TNC | Paul Labus | Ongoing | | plabus@tnc.org | 2400 New York Ave. | Whiting | IN | 46394 | | |
| 80 | new | Grand Calumet Area of Concern | MSU | | | | | | | | | | |
| 81 | new | Grand Calumet River and Indiana Harbor Ship Canal Initial Impact Study | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 82 | new | Grand Calumet River Basin Biodiversity Consertvation Plan | TNC | Paul Labus | | | | | | | | | |
| 83 | new | Grand Calumet River East Branch | City of Gary | Dorreen Carey | Ongoing | 219-882-3000 | dcarey@ci.gary.in.us | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 84 | new | Grand Calumet River Feasibility Study | USACE | Kirston Buczak | Ongoing | | Kirston.A.Buczak@lrc02.usace.army.mil | | Chicago | IL | 60606-7206 | | |
| 85 | new | Grand Calumet River RAP | USACE | Kirston Buczak | Ongoing | | Kirston.A.Buczak@lrc02.usace.army.mil | | Chicago | IL | 60606-7206 | | 3,000 lbs |
| 86 | new | Grand Calumet River Remedial Action Plan (RAP) | USACE | Kirston Buczak | Ongoing | | Kirston.A.Buczak@lrc02.usace.army.mil | | Chicago | IL | 60606-7206 | | http://dnr.state.il.us/lands/Landmgt/PARKS/R2/Wmpow.htm |
| 87 | new | Grand Calumet River Restoration Fund Council | GCRRF Trustees | Jim Smith | Ongoing | | jsmith@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 88 | new | Grand Calumet River TMDL | IDEM | Andrew Pelloso | Ongoing | | apelloso@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | http://www.iisgcp.org/ |
| 89 | new | Grand Calumet River TMDL Workgroup | USACE | Bill White | Ongoing | | Bill.G.White@lrc02.usace.army.mil | 111 N. Canal St, Suite 600 | Chicago | IL | 60606-7206 | | http://www.lrc.usace.army.mil/projects/Grand%20Cal%20RAP%20FY05.htm |
| 90 | new | Grand Calumet River West Branch | GCRRF Trustees | Jim Smith | Ongoing | | jsmith@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | Wayne Faatz | |
| 91 | new | Great Lakes Coastal Grants Programs | IDNR | Mike Molnar | Ongoing | | mmolnar@in.gov | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | |
| 92 | | H&H Auto Fluff | | | Complete | | | | | | | | |
| 93 | new | Habitat Protection and Restoration at the Grand Calumet River | TNC | Paul Labus | in progress | 219-473-7770 | plabus@tnc.org | 2398 New York Ave. | Whiting | IN | 46394 | | |
| 94 | new | Hammond Brownfield Project (2002) | City of Hammond | Ron Novack | | | | | | | | | |
| 95 | new | Hammond Manufactured Gas Plant Project | NIPSCO | | | | | | | | | | |
| 96 | new | Hammond Sanitary District Consent Decree | HSD | | | | | | | | | | |
| 97 | new | Hammond Sanitary District Grand Calumet River Project | HSD | Dean Button | | | dbutton@sehinc.com | | | | | | |
| 98 | new | Hammond Stormwater Relief Interceptor - Design | USACE | Imad Samara | Ongoing | | Imad.Samara@usace.army.mil, | | Chicago | IL | 60606-7206 | | |
| 99 | | Hazardous Waste - Facilities regulated under Resources Conservation And Recovery Act | IDEM | Mike Sickels | Ongoing | | msickels@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 100 | | IDEM Rule 13 Coordinator | IDEM | Chris York | | | cyork@idem.IN.gov | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | http://www.in.gov/idem/water/npdes/permits/wetwthr/storm/rule13.html |
| 101 | new | Indiana Water Institute | Purdue University Calumet | Mike Gelt | Ongoing | | | 2200 169th Street | Hammond | IN | 46323-2094 | | |

| RAP | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 102 | new | Interim Headworks Project | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 103 | new | J-Pit | City of Gary | Mary Mulligan | Ongoing | 219-882-3000 | mmulligan@ci.gary.in.us | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 104 | new | Karner Blue Butterfly Habitat/ Corridor Establishment | TNC | Paul Labus | in progress | 219-473-7770 | plabus@tnc.org | 2399 New York Ave. | Whiting | IN | 46394 | | |
| 105 | new | Lake Michigan Coastal Program | IDNR | Mike Molnar | Ongoing | 317-233-0132 | coastal@dem.state.in.us | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | |
| 106 | new | Lake Michigan E. coli TMDL | IDEM | Andrew Pelloso | Ongoing | | apelloso@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | http://www.in.gov/idem/land/hazwaste/manifest/amr.html |
| 107 | new | Lake Michigan LaMP Implementation | IDEM | | | | | | | | | | |
| 108 | new | Large Diameter Sewer Cleaning and Televising Project | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 109 | new | Lehigh Cement/ Gary Marina Access Project | IDEM | Ryan Groves | Ongoing | | rgroves@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 110 | new | Little Calumet Prairie | IUN | Spencer Cortwright | | (219) 980-7760 | scortwr@iun.edu | | | | | | |
| 111 | new | Long-term Combined Sewer Overflow Plan - East Chicago | City of East Chicago | Pete Baranyai | Ongoing | 219-391-8466 | internet:pbaranyai@eastchicago.com | 5201 Indianapolis Blvd | East Chicago | IN | 46312 | | |
| 112 | new | Long-term Combined Sewer Overflow Plan - Gary | City of Gary | Jim Meyer | Ongoing | 219-938-0800 | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 113 | new | Long-term Combined Sewer Overflow Plan - Hammond | HSD | Mike Unger | Ongoing | | webmaster@hmdin.com | 5143 Columbia Ave. | Hammond | IN | 46327 | | |
| 114 | new | Marquette Park Pavilion Parking Lot Storm Water Drainage Project | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 115 | | Memorandum of Cooperation - Floating Oil Project | IDEM | Craig Schroer | Ongoing | 317-234-0974 | cschroer@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | http://www.state.in.us/nrc_dnr/lakemichigan/govcoorstr/govcoorstrc.html#page12a |
| 116 | new | Mercury Reduction Project | US Steel | David Blomberg | Ongoing | 219-888-5582 | | 1 N Broadway, MS 70 | Gary | IN | 46402 | | |
| 117 | | MIDCO I | USEPA | Richard E. Boice | | (312) 886-4740 | boice.richard@epa.gov | 77 W. Jackson Blvd. | Chicago | IL | 60604 | | |
| 118 | new | Migratory Bird Trap in North Hammond | | Ron Novack | Ongoing | | hamenv@jorsm.com | 5925 Calumet ave. | Hammond | IN | 46324 | | |
| 119 | | Municipal Solid Waste disposal will be reduced by 50% before January 2001 | IDEM/USEPA | Amy Burns | Ongoing | | aburns@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | http://in.water.usgs.gov/newreports/mercury/ |
| 120 | | Natural Resources Damages Assessment | IDEM / IDNR / USFWS / NOAA / NPS | Beth Admire | Ongoing | | badmire@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | http://www.in.gov/idem/land/vrp/memorandumforrcracasites.pdf |
| 121 | | Ninth Ave. Dump | USEPA | Bernard Schorle | Complete | (312) 886-4746 | schorle.bernard@epa.gov | 77 W. Jackson Blvd. | Chicago | IL | 60604 | | http://www.in.gov/idem/land/stateclean up/sitesummaries/calumet.html |
| 122 | new | North Lake Street Sewer Improvements Project | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 123 | new | Northwest Indiana Brownfield Redevelopment Project | | Reggie Korthals | Ongoing | | rkorthals@nirpc.org | 6100 Southport Road | Portage | IN | 46368 | | |
| 124 | | Ozone Action days | Three States | Reggie Korthals | Ongoing | | rkorthals@nirpc.org | 6100 Southport Road | Portage | IN | 46368 | | |
| 125 | | Phillips Terminal | IDEM | Ryan Groves | Ongoing | | rgroves@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 126 | | Prevent and Clean Up Contaminated Sites | IDEM/USEPA | Steve West | Ongoing | | swest@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |

| RAP | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | | Prevention of Sediment Accumulation | IDEM/USEPA | Steve West | Ongoing | | swest@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 128 | | Prevention/ Reduction of Pollination Entering the System | IDEM/USEPA | Amy Burns | Ongoing | | aburns@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | http://nature.org/wherewework/northamerica/states/indiana/work/art6157.html |
| 129 | | Ralston Street Lagoon | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 130 | new | Ralston Street Lagoon Restoration Study and Project | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 131 | new | Redevelopment Technical Assistance | City of Gary | Mary Mulligan | Ongoing | 219-882-3000 | mmulligan@ci.gary.in.us | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 132 | new | Rehabilitation of the No. 9 and No. 10 Primary Clarifiers | GSD | Jim Meyer | Ongoing | | jbmeyer@netnitco.net | 504 Broadway, Suite 1014 | Gary | IN | 46402-1236 | | |
| 133 | new | Remediation of Contaminated Sediments | IDEM | | | | | | | | | | |
| 134 | new | Resouce Conservation and Ecological Enhancement of Industrial Lands | WHC | Daniel Goldfarb | Complete | | internet:daniel.goldfarb@bascor.com | 5254 Hohman Ave. | Hammond | IN | 46321 | | http://www.wildlifehc.org/about/locations.cfm#northwestindiana |
| 135 | new | Restoration of Slag Sites Using Native Vegetation | City of Hammond | Ron Novack | | | | | | | | | |
| 136 | | Ridesharing | Air Pollution Board | Reggie Korthals | | | rkorthals@nirpc.org | 6100 Southport Road | Portage | IN | 46368 | | |
| 137 | new | Roxanna Marsh | IDEM | Jim Smith | Ongoing | | jsmith@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 138 | new | Rule 13 East Chicago | ECSD | Michael J. Suty | | | | 5201 Indianapolis Blvd | East Chicago | IN | 46312 | | |
| 139 | | Rule 13 Gary | GSD | Charles G. Peller, Jr. | | 219-944-9545 | spike@gsd.com | 3600 West 3rd Ave. | Gary | IN | 46406 | | http://www.lrc.usace.army.mil/projects/Wolf%20Lake%20FY05.htm |
| 140 | new | Rule 13 Hammond | HSD | Stanley Dostatni | | | | 5413 Columbia Ave. | Hammond | IN | 46327 | | |
| 141 | | Safety-kleen | IDEM | Ryan Groves | Ongoing | | rgroves@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 142 | | Sediment Transport Model | USACE | Bill White | in progress | | Bill.G.White@lrc02.usace.army.mil | 111 N. Canal St, Suite 600 | Chicago | IL | 60606-7206 | | http://www.lrc.usace.army.mil/projects/Grand%20Cal%20RAP%20FY05.htm |
| 143 | new | Shirley Hienze Restoration Project | Hienze Trust | Kristopher M. Krouse | Ongoing | | land@heinzetrust.org | 444 Barker Road | Michigan City | IN | 46360 | | http://www.heinzetrust.org/ |
| 144 | new | Southern Grand Calumet River Cleanup | US Steel | Mark Rupnow | Ongoing | 219-888-3449 | mrupnow@uss.com | 2 N Broadway | Gary | IN | 46403 | | |
| 145 | | State Cleanup | IDEM | Ryan Groves | Ongoing | | rgroves@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 146 | new | Sustainable Development Initiative for Northwest Indiana | NIRPC | | | | | | | | | | |
| 147 | new | Technical Outreach Services Communities (TOSC) Program assistance | MSU | Kurt Riley | Ongoing | | rileyki@egr.msu.edu | B-100 Research Complex Engineering | East Lansing | MI | 48824 | | |
| 148 | | The Clark and Pine Nature Preserve, Eastern Addition Restoration | TNC | Paul Labus | in progress | 219-473-7770 | plabus@tnc.org | 2400 New York Ave. | Whiting | IN | 46394 | | |
| 149 | | The Ivanhoe Nature Preserve Restoration | TNC | Paul Labus | in progress | 219-473-7770 | plabus@tnc.org | 2400 New York Ave. | Whiting | IN | 46394 | | |
| 150 | | The Southern Lake Michigan Initiative | TNC | Paul Labus | in progress | 219-473-7770 | plabus@tnc.org | 2400 New York Ave. | Whiting | IN | 46394 | | |

| RAP | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 151 | | U.S. Army Corps of Engineering' Indiana Harbor and Canal Dredging Project | ECWMD | Thomas Frank | Ongoing | 219- | tfrank@eastchicago.com | 4525 Indianapolis Blvd. | East Chicago | IN | 46312-3226 | | http://www.epa.gov/R5Super/significant_actions/2003/030110.txt |
| 152 | | U.S. Army Corps of Engineering' Indiana Harbor and Canal Dredging Project | USACE | Bill White | Ongoing | | Bill.G.White@lrc02.usace.army.mil, | 111 N. Canal St, Suite 600 | Chicago | IL | 60606-7206 | | http://www.lrc.usace.army.mil/projects/IHCCDF.htm |
| 153 | | U.S. Steel (water decree) | US Steel | David Behrens | | | DCBehrens@uss.com | 1 N Broadway | Gary | IN | 46402 | | |
| 154 | new | US Steel Cite Committee | US Steel | Mark Rupnow | Ongoing | 219-888-3449 | mrupnow@uss.com | 1 N Broadway | Gary | IN | 46402 | | |
| 155 | | USS Lead | US EPA | Mirtha Caprio | Ongoing | | capiro.mirtha@epa.gov | 77 W. Jackson Blvd. | Chicago | IL | 60604 | | |
| 156 | new | Vermette Machine Company | | | | | | | | | | | |
| 157 | | Waste Minimization - Hazardous Waste Manifest Program | IDEM | Michelle Weddle | Ongoing | 317233-4624 | mweddle@idem.IN.gov | P.O. Box 6015 | Indianapolis | IN | 46206-6016 | | |
| 158 | | Watershed Management Program | IDEM | Linda Schmitt | Ongoing | | lschmitt@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 159 | new | Whiting Shoreline Project | USACE | Felicia Kirksey | Ongoing | | Felicia.Y.Kirksey@lrc02.usace.army.mil | | | | | | |
| 160 | new | Whiting Shoreline Project - Project Plan Study | USACE | Felicia Kirksey | Ongoing | | Felicia.Y.Kirksey@lrc02.usace.army.mil | | | | | | |
| 161 | new | Wildlife Habitat Council urban green space project | | Daniel Goldfarb | Ongoing | | internet:daniel.goldfarb@bascor.com | 5253 Hohman Ave. | Hammond | IN | 46320 | | http://www.wildlifehc.org/about/locations.cfm#northwestindiana |
| 162 | new | Wolf Lake | USACE | Kirston Buczak | Ongoing | | Kirston.A.Buczak@lrc02.usace.army.mil | | Chicago | IL | 60606-7206 | | |
| 163 | new | Wolf Lake Aquatic Ecosystem Restoration Project | USACE | Kirston Buczak | Ongoing | | Kirston.A.Buczak@lrc02.usace.army.mil | | Chicago | IL | 60606-7206 | | |
| 164 | new | Wolf Lake Terminals | EPA | | | | kip@wolflakeinc.com | P.O. Box 565 | Hammond | IN | 46325 | | |
| 166 | | Accidental Releases | IDEM/USEPA | Patel Balvent | Ongoing | | ??? | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 167 | | Achievement of Air Quality Standards | IDEM/USEPA | Lawrence Brown | Ongoing | | lbrown@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 168 | | Air Toxics Program | IDEM/OAQ | Patel Balvent | Ongoing | | ??? | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 169 | | American Chemical Services | | Kevin Adler | | (312) 886-7078 | adler.kevin@epa.gov | | | | | | |
| 170 | new | American Maize Products Corp | | | | | | | | | | | |
| 171 | new | American National Can | | | | | | | | | | | |
| 172 | new | American National Can | | | | | | | | | | | |
| 173 | | Amoco Pipeline Company | | | | | | | | | | | |
| 174 | | Amoco Soil characterization Work Plan & Ground Water Evaluation | BP-Whiting | Dave Kalet | Ongoing | | | 2815 Indianapolis Blvd. | Whiting | IN | 46394 | | |
| 175 | | Atmospheric Deposition | USGS | Martin Risch | Ongoing | | mrrisch@usgs.gov | 5957 Lakeside Boulevard | Indianapolis | IN | 46278 | | |

| P | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 176 | new | Brownfield Redevelopment Imitative | NIRPC | Kay Nelson | Unknown | | knelson@jorsm.com | 8989 Columbia Ave. | St. John | IN | 46373 | Ted Smith | |
| 177 | new | Chase St. Savanna & Wetland Acquisition | Lake Co. Parks Dept. | | | | | | | | | | |
| 178 | | Citizens Advisory Groups | | | | | | | | | | | |
| 179 | new | Combined Sewer Overflow Strategy | IDEM | Reggie Baker | Ongoing | 317-233-0473 | rbaker@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 180 | | Control of Urban Runoff | IDEM | Linda Schmitt | Ongoing | | lschmitt@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 181 | | Corridor Planning | | | | | | | | | | | |
| 182 | new | Develop Great Lakes Imperiled Species Information | Indiana Natural Heritage Data Center | | | | | | | | | | |
| 183 | | Dioxin | IDEM/OAQ | Patel Balvent | Ongoing | | ??? | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 184 | new | DuPont | | | | | | | | | | | |
| 185 | new | DuPont Restricted Waste Landfill | DuPont | | | | | | | | | | |
| 186 | new | East Chicago Sanitary District Consent Decree | ECSD | | | | | | | | | | |
| 187 | new | East Chicago School Diesel Bus Refits | School City of East Chicago | | | | | | | | | | |
| 188 | | Elimination of the Use of Slag as Fill Material | IDNR | Tom Post | Ongoing | | tpost@in.gov | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | |
| 189 | new | Emerging Technology Demonstration at the Erie Pier CDF | USACE | | | | | | | | | | |
| 190 | new | Environmental Performance Partnership | IDEM | | | | | | | | | | |
| 191 | new | Farris | | | | | | | | | | | |
| 192 | new | Federated Metals | | | | | | | | | | | |
| 193 | new | Ferro Kiel Company | | | | | | | | | | | |
| 194 | new | Gary Development Corp. | | | | | | | | | | | |
| 195 | | Gary Lagoons Removal Site; 5622 and 5624-34 Industrial Highway | USEPA | Turner/ Jaster | Ongoing | | | 77 W. Jackson Blvd. | Chicago | IL | 60604 | | |
| 196 | | Gary Sanitary District | | | | | | | | | | | |
| 197 | new | Georgia Pacific Surface Impoundment | Georgia Pacific | | | | | | | | | | |
| 198 | | Grand Calumet River Mercury | IDEM/OAQ | Patel Balvent | Ongoing | | ??? | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 199 | new | Great Lakes Sediment Management Support-1 | USACE | | | | | | | | | | |
| 200 | new | Great Lakes Sediment Management Support-2 | USACE | | | | | | | | | | |
| 201 | | Illinois - Indiana Sea Grant | Purdue University Calumet | Leslie Dorworth | Ongoing | | | | | | | | |
| 202 | | Increase Protection and Restoration of Critical Habitat by 100% by 2007 | IDEM/IDNR/USFWS | Jim Smith | Ongoing | | jsmith@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 203 | new | Indiana Coastal Workshop: Finding the Right Balance | Save the Dunes | | | | | | | | | | |
| 204 | new | Indiana Dunes National Lakeshore - Adopt a Dune | US Steel | Lisa Ranc | Ongoing | 219-888-5901 | | 1 N Broadway | Gary | IN | 46402 | | |
| 205 | | Indianapolis Boulevard Sewer Project | | | | | | | | | | | |

| RAP | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | new | Inland Steel | | | | | | | | | | | |
| 207 | new | Inland Steel | | | | | | | | | | | |
| 208 | new | Inland Steel | | | | | | | | | | | |
| 209 | new | Inland Steel - State Cleanup | EPA | | | | | | | | | | |
| 210 | new | Inland Steel Company / Ispat Inland, Inc. (CAA,CWA,RCRA, SDWA) | | | | | | | | | | | |
| 211 | | Interagency Technical Task Force on E. coli | IDNR | Jenny Kintzele | | | | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | |
| 212 | new | ISG - State Cleanup | EPA | | | | | | | | | | |
| 213 | new | Lake & River Enhancement Program (LARE) | IDNR | Jill Hoffman | Ongoing | 317-233-5468 | jhoffma@dem.state.in.us | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | |
| 214 | | Lake Michigan Air Directors Consortium | LADCO | Kathy Watson | Ongoing | | kwatson@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 215 | new | Lake Michigan Coastal Dynamic Section | IDNR | Steve Davis | Ongoing | 219-874-8316 | sdavis@dnr.statet.in.us | 402 West Washington Street, Room W265 | Indianapolis | IN | 46204 | | http://www.epa.gov/R5Super/npl/indiana/IND980500524.htm |
| 216 | | Lake Sandy Jo | | | | | | | | | | | |
| 217 | new | LTV Steel/ Clark Landfill | LTV | | | | | | | | | | |
| 218 | new | Marquette GreenWay | IDNR | Mike Molnar | | | | | | | | | |
| 219 | | Meet Surface Water Quality Standard | IDEM/USEPA | Mark Holdeman | Ongoing | | mholdma@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 220 | | MICDO II | USEPA | Richard Bodice | Ongoing | (312) 886-4740 | boice.richard@epa.gov | 77 W. Jackson Blvd. | Chicago | IL | 60604 | | |
| 221 | new | Northern Pike Spawning and Nursery Restoration Phase | Wisconsin DNR | | | | | | | | | | |
| 222 | | Ozone | IDEM | Patel Balvent | Ongoing | | ??? | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 223 | | Ozone Transport Assessment Group (OTAG) | OTC | Kathy Watson | Ongoing | | kwatson@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 224 | | Particulate Mater (PM10) | IDEM | Patel Balvent | Ongoing | | ??? | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 226 | | Protect Ground Water | IDEM/USEPA | Jerry Rud | Ongoing | | jrud@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 227 | | Public Outreach and Education | | | | | | | | | | | |
| 228 | | Removal Action by LTV Steel | | | | | | | | | | | |
| 229 | new | Rhone Poulenc | | | | | | | | | | | |
| 230 | new | Rhone Poulenc | | | | | | | | | | | |
| 231 | new | Rhone Poulenc (Basic Chemicals) | | | | | | | | | | | |
| 232 | new | Safety Kleen | | | | | | | | | | | |
| 233 | | Solid Waste (Illegal Dumps) | IDEM/OLQ | Paul Higgenbottom | Ongoing | | phigginb@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 234 | | Solid Waste Disposal will be safely Managed | IDEM/USEPA | Jerry Rud | Ongoing | | jrud@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 235 | | SOX | | | | | | | | | | | |
| 236 | new | Stormwater and Sediment Control Program | IDNR | Larry Osterholz | Ongoing | 219-866-8554 | losterholz@dnr.state.in.us | 800 South College Ave. | Rensselaer | IN | 47978 | | |
| 237 | | Stormwater Control Program, Including Best Management Practices | IDEM | Linda Schmitt | Ongoing | | lschmitt@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 238 | | Superfund | IDEM/OLQ | Paul Higgenbottom | Ongoing | | phigginb@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |

| :AP | | Project Name | Party | Manger | Status | Phone | email | Address | City | State | Zip | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 239 | | The Cooperative Partnership Agreement | Steering Committee | Steering Committee | | | | | | | | | |
| 240 | | The RAP GIS | IDEM | Kevin Miller | in progress | | kmiller@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 241 | | Transportation Programs (non-point source run-off) | IDEM/OLQ | Paul Higgenbottom | Ongoing | | phigginb@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 243 | new | US Steel Perigran Falcon Project | US Steel | Mark Happer | Ongoing | 219-888-3953 | | | | | | | |
| 244 | | Water Quality Certification (401) & (404) | IDEM/ACE | Marty Maupin | Ongoing | | mmaupin@dem.state.in.us | P.O. Box 6015 | Indianapolis | IN | 46206-6015 | | |
| 245 | new | Wolf and George Lake Studies | INDOT | Lisa Shrader | Ongoing | 219-325-7522 | lshrader@indot.state.in.us | 100 N. Senate Ave., Room IGCN 755 | Indianapolis | IN | 46204 | | |
| 246 | new | Wolf Lake Conservation Area | ILDNR | Saki Villalobos | Ongoing | | wmpowers@dnrmail.state.il.us | 12949 South Avenue O | Chicago | IL | | | |

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NATURAL RESOURCES DEFENSE COUNCIL

# TESTIMONY OF ANN ALEXANDER
# SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

## at the

# PUBLIC HEARING CONCERNING THE DRAFT US STEEL NPDES PERMIT

## December 11, 2007

My name is Ann Alexander. I am a senior attorney with the Midwest Program of the Natural Resources Defense Council (NRDC) here in Chicago, Illinois.

We very much appreciate the willingness of USEPA Region 5 to call this public hearing. Even more so, we appreciate its careful review of the US Steel NPDES permit that is the subject of this hearing, and willingness to proffer formal objection regarding the failure of the draft permit to meet Clean Water Act (CWA) requirements. As you are undoubtedly aware, NRDC and the Environmental Law and Policy Center (ELPC) submitted extensive comments to the Indiana Department of Environmental Management (IDEM) concerning the permit, addressing what we found, with the assistance of our consultant Alex Sagady, to be critical shortcomings in the draft. A copy of those comments is attached to this testimony for reference.

With one minor exception (discussed below), we fully support Region 5's grounds for objection. The Region has identified clear and significant ways in which the permit fails to meet basic CWA requirements regarding technology-based effluent limits, water-quality based effluent limits (WQBELs), antidegradation, cooling water intake structures, use of compliance schedules, and many others.

However, we also believe it is critical that Region 5 modify its objection to include shortcomings of the draft permit that fall into the categories identified by USEPA, but were not addressed in the initial objection letters. For example, Region 5 identified a number of pollutants for which technology-based limitations in the permit are less stringent than IDEM's own effluent limit justifications, a problem that clearly needs to be fixed. However, Region 5's objection did not address numerous pollutants that the US Steel facility is known to be discharging – from TRI reports or analysis of plant processes – for which no limits at all are included in the permit. Similarly, Region 5 identified several pollutants for which WQBELs are necessary on the basis of IDEM's "reasonable potential to exceed" demonstration for those pollutants.

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But the objection does not address the many other pollutants that require WQBELs because of the impaired water quality of the Grand Calumet River for those pollutants. Finally, while Region 5 correctly identifies several pollutants for which discharge levels are increased over levels allowed by the 1994 permit, triggering antidegradation requirements, there are several additional pollutants NRDC and ELPC have identified that need to be added to that list. I will also discuss several additional concerns identified by NRDC and ELPC that are not substantially addressed in Region 5's objection, but need to be.

We note, in this regard, that the regulations governing USEPA NPDES permit objections give the Region broad latitude to expand the grounds for its original objection. Those regulations provide that following the public hearing, "the Regional Administrator shall reaffirm the original objection, modify the terms of the objection, or withdraw the objection." 40 C.F.R. § 123.44(g). Thus, the regulations expressly contemplate that information may come to light at the hearing that would lead USEPA to see the need to add further grounds for objection. Clearly, to the extent there are significant deficiencies in the draft permit that have not yet been addressed by Region 5, it is in everyone's interest that they be resolved at this stage rather than after the final permit is issued.

## I. Recommendations Concerning USEPA's Stated Grounds for Objection

### A. WQBELs

In its October 1 letter objecting to the draft permit, USEPA stated that the draft permit failed to include WQBELs for several pollutants that are referenced in Attachment IV to IDEM's fact sheet accompanying the draft permit, listing pollutants which IDEM has determined have reasonable potential to cause or contribute to an excursion above applicable water quality standards (WQS). Specifically, the objection states that IDEM inappropriately failed to include the Attachment IV WQBEL limits for $CBOD_5$ at Outfall 034, and whole effluent toxicity (WET) at outfall 028/030 and 034.

NRDC fully supports USEPA its objection to IDEM's failure to include the WQBELs identified in its objection. However, the objection does not fully address the failure of the draft permit to incorporate required WQBELs. It is imperative that the permit include WQBELs for *all* of the pollutants for which the Grand Calumet River is listed as impaired. As discussed in NRDC's comments, the River – to which the US Steel outfalls discharge – is listed as impaired for, inter alia, ammonia, cyanide, oil and grease, total suspended solids (TSS), and chlorides (see Comments Attachment 10), but the permit for the most part (with limited exceptions) neglects to include WQBELs for these pollutants. At some of the outfalls for which the 1999 permit application clearly indicates the presence of such pollutants there is no effluent limitation at all for them, and at others there is only a technology-based limitation. See Comments at 25-56.

In some cases, moreover, the failure to include a WQBEL is expressly grounded in a rationale that is both unlawful and makes no practical sense. In the case of ammonia, IDEM stated that it is declining to include WQBELs for ammonia at outralls 005 and 010

on the ground that US Steel is currently providing treatment that is keeping ammonia levels sufficiently low. See Fact Sheet at 21-22. Yet these outfalls clearly have the potential to discharge ammonia into a waterbody that is impaired for that pollutant, meaning that a WQBEL is required. Moreover, if anything ever went wrong with US Steel's ammonia treatment, such that ammonia levels increased beyond appropriate WQBEL limits, IDEM and citizens would be powerless to do anything about it in the absence of an enforceable WQBEL limit.

We note, in addition, that the "reasonable potential" numbers in IDEM Attachment IV are grounded in fundamentally deficient analysis. Specifically, the analysis failed to consider either pollutant inputs to the Grand Calumet River from the facility's storm water discharges – which, as detailed in NRDC's comments, are significant (Comments at 2-14), or discharges from passive dewatering. Moreover, there several pollutants for which IDEM's Preliminary Effluent Limitation (PEL) calculations (Comments Attachment 9) indicate reasonable potential to exceed, but which are not listed in Attachment IV. USEPA should therefore not take the Attachment IV numbers at face value, but should require that those numbers be revised and supplemented to take into account all relevant information.

Finally, we are concerned that the basis for the PELs which underlie the "reasonable potential" numbers in Attachment IV for $CBOD_5$ and $TU_c$ has not been articulated in the record or fact sheet. These bases need to be fully set forth by IDEM.

### B. Technology-Based Effluent Limitations

In its October 1 objection letter, USEPA identified discrepancies between Attachment III to the permit fact sheet, which sets forth technology-based effluent limitations that IDEM determined to be appropriate, and the technology-based limitations actually included in the permit at internal outfall 604. Specifically, the pollutants identified as include in Attachment III but not included in the permit were monthly average load limitations for copper, lead, and zinc, and daily maximum load limitations for lead and zinc.

With respect to copper and lead, NRDC agrees that, *at minimum*, the technology-based limits set forth in Attachment III should be incorporated into the permit. With respect to zinc, we note that the Attachment III limit is actually less stringent than the limit contained in the 1994 permit, such that imposition of the Attachment III limit would result in impermissible backsliding. The 1994 permit limit for Outfall 034 was Average 34.98/Max 74.68 lbs/day, and the draft permit moved the toxicant limits to internal outfall 604 (which discharges to outfall 034), and set those limits at Average 20.2/Max 43.5 lbs./day. However, the Attachment III limit is Average 50.96/Max 100.93, clearly much higher than either the 1994 limits or the 2007 internal outfall 604 limits.

There are two ways, however, in which USEPA's objection does not go far enough to address the serious shortcomings of the permit with respect to technology based effluent limitations. First, there are a whole array of additional toxic pollutants

being discharged by the US Steel facility for which the permit provides no limits whatsoever. Second, in the case of many pollutants, including lead and zinc as identified by USEPA, a technology-based limit is insufficient, as a more stringent WQBEL is required. And third, a problem with the permit – which USEPA's focus on internal outfall 604 threatens to exacerbate – is its failure to ensure that loading limits from internal outfalls are not less stringent than loading limits at the external outfalls to which they discharge.

With respect to the first issue, NRDC's comments to IDEM provide an extensive list of pollutants that the facility is known or strongly suspected to discharge from its outfalls. See Comments at 22-23. Although US Steel's Toxics Release Inventory (TRI) report indicates that arsenic, hexavalent chromium, cyanide compounds, manganese compounds, polycyclic aromatic hydrocarbons, and nitrate compounds are being discharged to water in significant amounts, the permit for the most part (with limited exceptions) lacks technology-based limits for these pollutants. Additionally, NRDC identified in its Comments several processes at the facility that produce additional contaminants that require technology-based limits not found in the draft permit. See Comments at 23-25. Most notable among these is freeze protection wastewater, which both the fact sheet and the draft permit acknowledge are discharged from the facility, but for which the permit provides no limits whatsoever. Comments at 24-25. For all of these pollutants, the permit must be modified at minimum to establish technology-based effluent limits, and where appropriate to establish WQBELs.

With respect to the second issue, while, as noted, we agree with USEPA that technology-based limits for copper and lead are minimally necessary, we note that in both cases the record indicates that IDEM has identified at PEL indicating the need for a more stringent WQBEL at the associated external outfall, 034. For copper, the PEL is 3.1 lbs/day, radically lower than the 58.74 lbs/day limit set forth in Attachment III and recommended by USEPA; and for lead, 1X weekly monitoring at outfall 034.

This relates directly to the third issue, which is the need to ensure that the loading limits set at internal outfalls are no less stringent that the limits set at associated external outfalls. NRDC's comments discuss this problem extensively with respect to ammonia and cyanide, pointing out that allowable loading discharges from external outfall 005 are substantially less stringent that allowable loading discharges from internal outfall 501 which discharges to 005 without any interim treatment, such that outfall 005 is essentially set up for violation (and, compounding the problem, monitoring of outfall 005 has been reduced, making it more difficult to detect such violations). Comments at 17-18. Thus, while NRDC agrees with the need for more stringent standards for copper and lead at internal outfall 604, stringent WQBEL standards must be set for external outfall 034, and the outfall 604 standards should be equally stringent – in other words, more stringent than the technology-based standard identified in Attachment III and recommended by USEPA.

Generally speaking, in order to avoid this problem, and to aid in enforceability, NRDC recommends that for every internal outfall for which effluent loading limits are

established, identical loading limits should be established at the associated external outfall to the extent technically feasible.

## C. Antidegradation

In its October 1 objection letter, USEPA objects to provisions in the draft permit allowing discharges of zinc through internal outfall 603 to increase beyond levels in the 1994 permit. In its October 16 supplemental letter, USEPA further notes that the permit contains new effluent limits for total recoverable chromium, cadmium, copper, nickel, silver, total cyanide, total toxic organics, and hexavalent chromium through internal outfall 604. The letter notes that the 1994 permit did not contain limits for any of these pollutants except total recoverable chromium, for which the draft permit appears to authorize an increase in loading.

NRDC supports this objection, and concurs with the need to conduct appropriate antidegradation review before allowing any increased discharge of these pollutants (we had also identified total recoverable chromium discharge increases as triggering antidegradation requirements in our Comments at 21). However, once again, it is essential that Region 5 expand its objection to encompass all of the pollutants we have identified for which the 2007 draft permit contains less stringent limits than the 1994 permit. These pollutants are listed in our Comments at 18-22. Specifically, the draft permit allows an increased discharge of cyanide from outfall 010 during the indefinite "pre-mix scenario" (Comments at 19); removes altogether discharge limitations for benzene and fluoride at outfall 005 and ammonia at outfalls 018 and 019; and allows an increased discharge of oil and grease at outfall 034 (which, as noted above, actually requires a *more* stringent WQBEL limit). All of these reductions in stringency require antidegradation review, and the permit should not issue without it.

The removal of the benzene and fluoride limits is based on the particularly pernicious logic, noted above with respect to ammonia WQBEL limits, that since US Steel is currently using treatment to minimize its discharge of these pollutants, no limits are necessary – leaving IDEM and the public with no enforcement recourse should such treatment cease or fail. Simply put, a limited history of pollution reduction is not grounds for removing all limits and giving the Applicant a free pass to resume polluting. In any event, the procedure for calculating "reasonable potential" to cause WQS excursions set forth in 327 IAC 5-2-11.5 is grounded in the WQBELs evaluation process, and cannot appropriately be used as grounds to remove a technology-based effluent limitation.

## D. Compliance Schedules

In its October 1 letter, USEPA objects to the 5-year compliance schedules in the permit for benzo(a)pyrene, free cyanide, chronic WET, copper, zinc, ammonia, and mercury. In its supplemental October 16 letter, it further objects to compliance schedules for continuous thermal monitoring.

NRDC wholly supports these objections. Given that the relevant discharge limitation requirements have been in place federally since 1995, when the Great Lakes Water Quality Initiative (GLWQI) standards were promulgated (and in Indiana since 1997), US Steel has long been aware that it would need to comply with them. There is no reason why it could not have taken steps over the course of the last 12 years to prepare to implement those standards. Its failure to do so is particularly egregious in light of IDEM's lengthy delay in issuing the permit, which bought US Steel many years of extra time to figure out how to comply with the GLWQI standards. Any justification that IDEM proffers for the compliance schedules must take into account these facts.

### E. Cooling Water Intake Structures

In its October 16 supplemental letter, Region 5 states that the draft permit must be amended to include requirements consistent with CWA § 316(b), reflecting the best technology available for minimizing adverse environmental impact associated with the permittee's existing facility cooling water intake structures.

NRDC wholly supports this objection, and the need to include permit requirements consistent with § 316(b). Moreover, these requirements must be consistent with the decision of the Second Circuit Court of Appeals in Riverkeeper, Inc. v. USEPA, 475 F.3d 83 (2nd Cir. 2007), which defined the requirements of that section more stringently than had USEPA in its promulgated regulations, which have since been withdrawn.

NRDC recommends, as in its comments at 30-31, that the § 316(b) requirements include provisions mandating identification of aquatic biological losses through monitoring and reporting. Additionally, US Steel should be required to assess the content and impacts of the large amounts of filter backwash that are explicitly allowed by the permit. Specifically, filter backwash can be expected to contain large amounts of biological detritus, including total solids, total suspended solids, putrescible materials, dead algae, and other aquatic flora and fauna. Hence, this material may contain substantial BOD5; and its discharge may further violate narrative Indiana WQS, most notably against discharge of putrescible materials.

## II. Recommendations for Additions to Stated Grounds for Objection

In addition to the objections articulated by USEPA in its two letters, NRDC has identified in its Comments several additional problems with the draft permit that are not specifically addressed in those objections. We recommend that USEPA invoke its authority under 40 C.F.R. § 123.44(g) to modify the terms of its objection to require that these problems be corrected.

These issues are as follows:

1. Failure to Appropriately Address Stormwater Discharges. See Comments at 2-14. IDEM has effectively delegated wholesale to the permittee the authority to regulate stormwater at its facility, and deprived the public of any meaningful opportunity to address stormwater discharges. The required Storm Water Pollution Prevention Plan (SWPPP), the means by which storm water is to be addressed, has never been either reviewed by IDEM or made available to the public, contrary to the requirements of federal law (Comments at 2-3). Clearly, whatever US Steel is currently doing to address stormwater – and we do not actually know what it is doing, since the SWPPP is being kept secret – is insufficient, as reflected by consistently egregious exceedances of USEPA parameter benchmark monitoring values for stormwater.
2. Failure to Address Highly Contaminated Landfill Leachate Discharges. See Comments at 22. The draft permit authorizes the discharge of highly contaminated landfill leachate to the Grand Calumet River without any treatment.
3. Failure to Identify and Address Inconsistencies with TRI data. See Comments at 24. NRDC's consultant performed a "crosswalk" analysis between US Steel's year 2000 TRI report and mass of the reported pollutants derived from IDEM's "reasonable potential" analysis and found enormous discrepancies – particularly with respect to cyanide and mercury, for which US Steel has reported far higher discharges than the mass identified by IDEM. In its TRI report, the applicant admitted discharging 100 lbs. of mercury per year, but IDEM's "reasonable potential" analysis accounts for only 2.34 lbs. per year. Similarly, the TRI report reflects an annual discharge of 14,000 lbs. of cyanide, but the IDEM analysis accounts for only 1,042 lbs. These discrepancies must be explained and, if necessary, corrected before the final permit is issued.
4. Diminished Monitoring Requirements. See Comments at 14-16. The draft permit substantially weakens the monitoring requirements that were contained in the 1994 permit, without explanation or justification. As explained in the comments, the new, less stringent monitoring requirements are wholly inadequate to reliably assess compliance.
5. Weakening of 1994 Permit WET Compliance Requirements. See Comments at 28-29. The 1994 permit set forth extensive WET limits, including a toxicity reduction evaluation (TRE) and schedule of compliance for implementation of the limits, which became effective when US Steel's monitoring demonstrated toxicity. However, US Steel failed to comply with the TRE quarterly testing requirements. Based on US Steel's incomplete testing submissions, IDEM then eliminated most of the WET effluent limitations, failed to include an ongoing requirement to implement the TRE, and relaxed the schedule of compliance for the remaining WET limits. The draft permit should be amended to include all of the WET limits contained in the 1994 permit, including those flowing from the TRE.

Thank you for the opportunity to submit these comments. Once again, we very much appreciate Region 5's attention to this matter. If you have any questions, I can be reached at 312-780-7427 or AAlexander@nrdc.org.

Very truly yours,

Ann Alexander
Senior Attorney, Midwest Program

**COMMENTS ON USS GARY WORKS REQUEST FOR A NEW NPDES PERMIT**
**DECEMBER 6, 2007**

**My name is [redacted] I live [redacted] Michigan City and I am speaking on behalf of the Leagues of Women Voters of LaPorte County, the League of Women Voters of Porter County and the League of Women Voters of the Calumet Region.**

**The League of Women Voters has been active in advocating for protecting our natural resources since the 1920's, shortly after women received the right to vote. We believe resources should be conserved and protected to assure their future availability. The League believes pollution of these resources should be controlled in order to preserve the physical, chemical and biological integrity of ecosystems and to protect public health.**

**The public awareness of how polluted our waters had become lead to the enactment of the Clean Water Act in 1972. Of great concern was the condition of the Great Lakes. In 1978 the Great Lakes Water Quality Agreement was signed by the U.S. and Canada to reduce toxic pollutants from the Great Lakes.**

**This summer IDEM's decision to issue a permit for BP to increase its discharges into Lake Michigan as created an outcry of the public we have seen only once before. That occurred June 22, 1969 when the Cuyahoga River, saturated with pollutants, burst into flames. Time magazine described the Cuyahoga as the river that "oozes rather than flows" and in which a person "does not drown but decays." This event helped spur an avalanche of pollution control activities resulting in the Clean Water Act, Great Lakes Water Quality Agreement, and the creation of the federal and state Environmental Protection Agencies. The League was an active advocate for those legislative initiatives.**

**To implement those agreements and laws each major industrial classification has specific discharge limits based on their manufacturing operations and production output managed under National Pollution Discharge Eliminating System (NPDES) permits. We understand that these limits were developed by the United States Environmental**

**Protection Agency based on guidance documents throughout US industry and a determination of the Best Available Technology (BAT) used by the industry, and may even go beyond to require New Source Performance Standards (NSPS) for new facilities.**

**While we recognize USS has to meet Federal BATN NPDES limits, state limits, or local limits, if the watershed is compromised, shouldn't they be required to meet more stringent limits? Lake Michigan comprise 15% of all fresh water in northern America. Compromising its ecosystem has already affected the bottom line of many communities.**

**One of our major concerns about this discharge permit is the lack of consideration by IDEM that there are many other permits in the area to discharge into Lake Michigan. In fact in 2006 twenty-two industries had permits to discharge toxic chemicals into Lake Michigan and its tributaries from Porter and Lake counties. Lake County industries alone discharged 1,931,247 pounds.**

**While we all understand these counties are the hosts of major steel and oil industries we are concerned that IDEM does not take into consideration the cumulative impact of discharges when granting new or renewed permits. We were told that the data related to other permits is not taken into consideration when a permit is issued.. Each permit is based on its merits alone. In fact we were told we would have to go to Indianapolis and search thousands of documents to identify what is discharged into Northwest Indiana's waters. This certainly does not encourage citizens to work with the government to protect our environment.**

**We believe IDEM must consider cumulative impact when evaluating any new or renewal of discharge permits. Were this to be considered would the USS permit been granted? The Goal of The Clean Water Act to reduce discharges. The renewal of the USS Permit does not reflect that goal.**

**While we recognize Best Available Technology limits are based on what is technically available and economically achievable according to the company's research, there are always other alternatives and many of the alternative have increased costs to the company.**

**We ask you to recognize that our focus is on the cost to the waters of Lake Michigan, and all the communities who rely on that resource. We recognize that this region relies on an economically viable industrial base. Some alternative waste treatments require more space such as tanks; other alternatives require sophisticated equipment and energy to power it. If we are asking USS to go beyond EPA requirements, they need to have a reason.**

**That reason is a "Triple-Bottom-Line" approach, which looks at the cost/benefit ratio from financial, social, AND environmental viewpoints, would benefit all parties including USS. Is there not an incentive opportunity for IDEM to encourage USS to utilize a "Triple-Bottom-Line" approach here in Indiana?**

**If the principle concern for USS is cost can Indiana assist by providing incentives for investment in innovative resource recovery technologies?**

**Is not this the place and the time for IDEM to create a Blue Ribbon Panel to identify cost effective ways to harness, recover, reuse and remarket the materials currently dumped to Lake Michigan?**

**We recognize that reducing water consumption and wastewater discharge will require front end financing. Our appeal to Indiana and USS is to utilize the suggested Blue Ribbon Panel to seriously assess newer treatment alternatives, and pollution prevention programs, for reducing water use and reclaiming waste byproducts. USS and the rest of Indiana's industrial backbone have challenging environmental objectives to meet for their operations. The League of Women Voters does not see this as an 'either - or' choice. Rather this is an opportunity to be positive, proactive and protective of both our industrial and environmental bottom line.**

**We do believe Indiana does not need to continue to be the leader in discharge of pollutants into the surface water of our area. We urge IDEM to require reduction in toxic discharges by USS in its permit for this Century. We most work together to implement the Great Lakes Water Quality Agreement was signed by the U.S. and Canada to reduce toxic pollutants from the Great Lakes. The USS Permit request as presented does not abide by that standard.**

**Thank you,**

**Jeanette Neagu on behalf of:**

**The League of Women Voters of Laporte County**
**The League of Women Voters of Porter County**
**The League of Women Voters of the Calumet Region**

**Contact information:**

[redacted]
**Michigan City, IN**
[redacted]

ALLIANCE FOR THE GREAT LAKES

ENSURING A LIVING RESOURCE FOR ALL GENERATIONS

# Stronger Pollution Limits Needed for U.S. Steel Plant

The Great Lakes are home to 95 percent of America's and 20 percent of the world's fresh surface water, providing drinking water, jobs and recreation to some 40 million people.

A one-time gift from the glaciers, the waters are largely non-renewable and irreplaceable. A report by the Brookings Institution in September found that restoring this critical but vulnerable public resource is an investment -- with every dollar spent on bringing the Great Lakes back to health likely to bring another dollar in return.

In Oct. 1 comments to the Indiana Department of Environmental Management, prepared by an expert panel that included a retired staff member from U.S. EPA's Region 5 Water Division, the Alliance urged U.S. Steel's Gary Works facility to apply tighter permit standards to protect the Great Lakes.

"This flawed permit would reverse years of restoration efforts to improve Lake Michigan," says Lyman C. Welch, manager of the Alliance's Water Quality Program. "Strong pollution limits need to be written into the permit *now*, so that we're not faced with a cleanup situation later."

The Alliance is pleased the EPA has since adopted many of the issues raised in its written comments. Among the Alliance's chief concerns:

* U.S. Steel should not be given a five-year pass on discharges of pollutants -- including mercury, ammonia and cyanide -- that are detrimental to water quality and the people and wildlife dependent upon the Great Lakes.

* U.S. Steel's production activities cannot be allowed to impede the region's progress and investments towards environmental remediation and restoration along the Grand Calumet River and Lake Michigan shoreline.

* The final water pollution discharge permit must require substantial reductions in the discharge of cyanide, chromium, oil, grease and thermal pollution to the Grand Calumet River.

* The final permit must ensure a reduction in storm water runoff, which contains unknown quantities of pollution, to Lake Michigan.

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700 Fulton Street, Suite A • Grand Haven MI 49417 • (616) 850-0745 • Fax (616) 850-0765 • e-mail: michigan@greatlakes.org
www.greatlakes.org

Please include in comments from [redacted] Highland IN 46322 Sue Elliott

We support and agree with EPA's objection to the draft permit because it contains no requirement consistent with CWA § 316(b) that reflect the best technology available for minimizing adverse environmental impact associated with U.S. Steel's existing facility cooling water intake structures and no explanation in the fact sheet as to why such requirements are not included. Accordingly, we agree that the draft permit should not be issued without requiring U.S. Steel to submit sufficient structural and practice information to determine what level of aquatic biological damage mitigation is occurring through engineering and analysis of the best available control technology appropriate for existing facilities.

**Additional Concerns Not Addressed by EPA's objections**

Although we share USEPA's concerns with the draft NPDES permit for U.S. Steel, USEPA's objections as detailed in its two letters do not address all several concerns shared by all represented organizations. Accordingly, we recommend that USEPA invoke its authority under 40 C.F.R. § 123.44(g) to modify the terms of its objection to require that the following problems be corrected and addressed in the draft permit as well.

1. The Impaired Watershed Status of the Grand Calumet River

The Grand Calumet River is identified on the Clean Water Act Section 303(d) listing for impaired water quality for ammonia, cyanide, oil and grease, mercury and impaired biotic communities. Additionally, IDEM has designated the headwaters of the Grand Calumet under CWA Section 303(d) as impaired for these pollutants and U.S. Steel-Gary Works is clearly a predominant polluter in this location. Indeed, the facility's discharges constitute virtually all of the volume of water flow in this location. However, IDEM has failed to properly address or consider the consequences of these impaired water quality designations and its subsequent responsibilities concerning the applicable regulatory requirements and how these requirements affect the current permitting decision.

IDEM's failures in this regard are detailed fully in comments submitted previously by the Natural Resources Defense Council, Environmental Law and Policy Center (*see* NRDC/ELPC joint comments pp. 25-27), Save the Dunes Council (*see* Save the Dunes comments pp. 1-3) and People Opposed to Wastewater Without Enough Review (*see* POWWER comment pp. 13-14). All of these problems must be remedied with revised permit provisions and additional information from U.S. Steel where appropriate before the final permit is issued. However, as these changes are carried out, EPA should enter into an agreed order with U.S. Steel setting a timetable for compliance with GL-WQS. There should be no further delay in achieving these standards merely because the draft permit is inadequate.

2. Stormwater Provisions of the Draft Permit Violate the Clean Water Act

All comments, concerns and objections raised by comments jointly submitted to IDEM by the Natural Resources Defense Council and the Environmental Law and Policy Center relating to: IDEM's failure to either review the SWPPP or disclose its contents to the public; IDEM's failure to substantively review the SWPPP; draft permit provisions that impermissibly

undermine the BCT/BAT-BPJ requirements of the CWA; U.S. Steel's significant non-compliance with storm water monitoring and reporting requirements are adopted by all organizations and incorporated fully herein (*see* NRDC/ELPC joint comments pp. 2-10). Accordingly, we respectfully request that EPA address each and every one of these concerns before the draft permit is finalized.

3. Review of Complete Record of the Permit Proceedings Before the State Necessary to Determine Whether the Draft Permit Complies with the Clean Water Act

Due to inadequacies in information made available to the public, and to ensure adequate agency and public oversight of the permitting process, we respectfully request USEPA invoke its power under 40 CFR § 123.44(d)(2) and require IDEM to transmit the complete record of the permit proceedings before the State for USEPA's review.

**Conclusion:**

This concludes our comments on EPA's objections to the draft renewal NPDES permit of U.S. Steel. We thank you for your consideration and look forward to the public hearing of December 11, 2007.

Very truly yours,

Kim Ferraro
Executive Director, LEAF of Indiana, Inc.
Board Member, Save the Dunes Council
Board Member, Hoosier Environmental Council
Contact Member, POWWER

cc. Stephen L. Johnson, Administrator, U.S. Environmental Protection Agency
Peter Swenson, Branch Chief, NPDES Programs Branch, U.S. EPA
Stan Rigney, IDEM, Office of Water Quality/ Industrial NPDES Permits Section
Kenneth Mentzel, Manager of Environmental Control, U.S. Steel-Gary Works
Ann Alexander, Senior Staff Attorney, Natural Resources Defense Council
Albert Ettinger, Senior Staff Attorney, Environmental Law & Policy Center
Tom Anderson, Executive Director, Save the Dunes Council
Lyman C. Welch, Manager Water Quality Program, Alliance for the Great Lakes
Jesse Kharbanda, Executive Director, Hoosier Environmental Council
Max Muller, Environment Illinois
Jeanette Neagu, League of Women Voters of Northwest Indiana
Chuck Siar, President, Izaac Walton League of America, Indiana Division
John Goss, Executive Director, Indiana Wildlife Federation
Glenn Pratt, Chair Conservation Committee, Sierra Club - Hoosier Chapter

Chamber of Commerce claimed permit process is careful and thought out

Test America "ill" US Steel permit monitors

"environmental people" at US Steel generate their numbers "at or below permit levels"

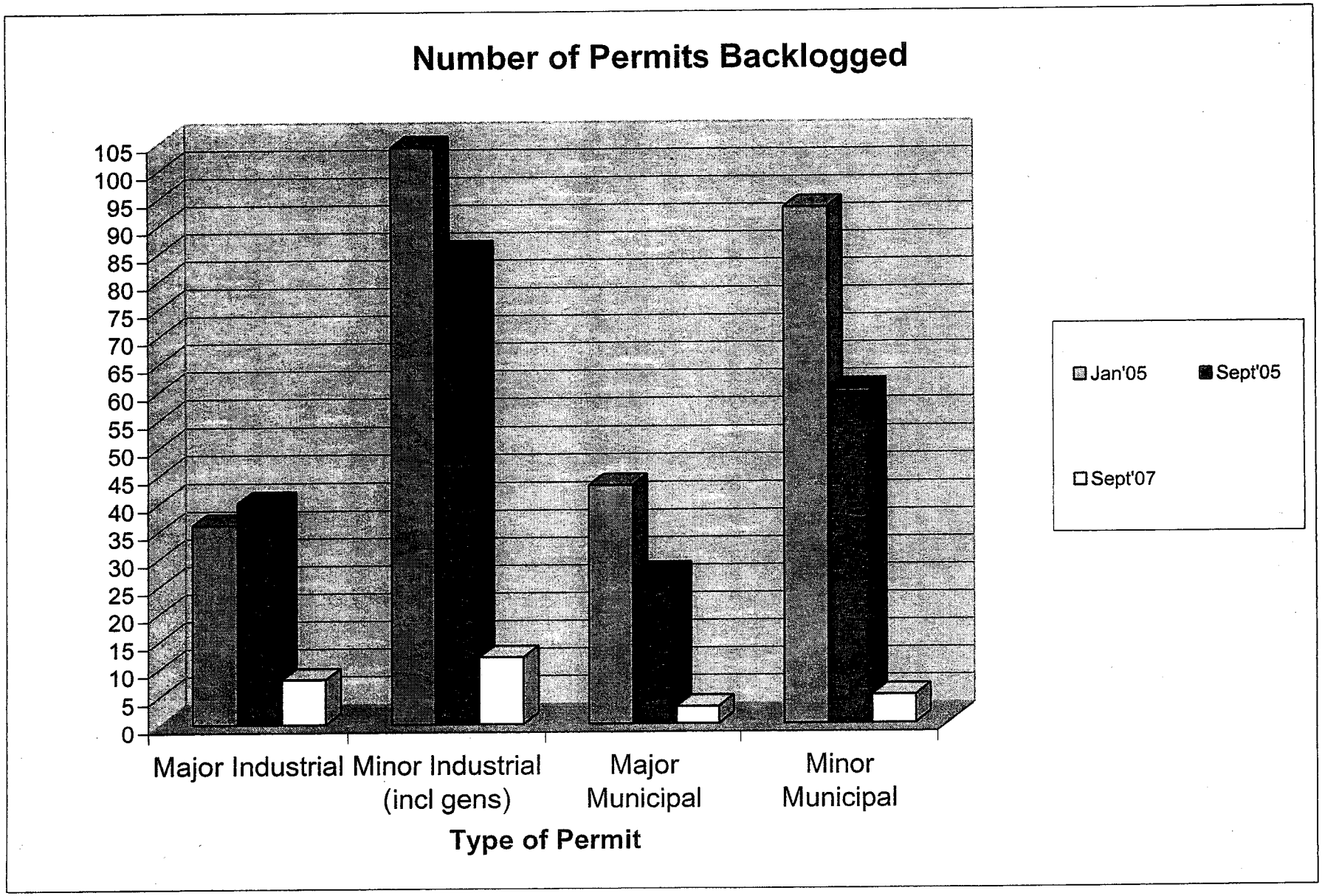
Comment

pollutant levels each process needs to be looked at

permit less than world (International) would comply with requirements

EPA has ability to force technology clean up "legacy" waste

Ruby /


Number of Permits Backlogged
105
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
Major Industrial
Minor Industrial (incl gens)
Major Municipal
Minor Municipal
Type of Permit
Jan'05
Sept'05
Sept'07

# United States Department of the Interior
## Fish and Wildlife Service
Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273


October 1, 2007

Mr. Stan Rigney
Indiana Department of Environmental Management
Office of Water Quality
Industrial NPDES Permits Section
MC 65-42 IGCN, Room 1255
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Dear Mr. Rigney:

These comments are provided on the draft National Pollution Discharge Elimination System (NPDES) permit number IN0000281 dated July 2, 2007 for U.S. Steel, Gary Works (USX) in Gary, Lake County, Indiana. In addition, we have reviewed IDEM's undated fact sheet related to USX's July 2, 2007 draft NPDES permit.

This letter has been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and is consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U.S. Fish and Wildlife Service's Mitigation Policy.

**Site Specific Criteria for Cyanide**

Appendix V of the IDEM fact sheet explains the development and revision of the Site Specific Criteria development for Cyanide discharged to the Grand Calumet River. We appreciate the fact that IDEM has now taken into consideration some of the information we previously provided regarding the extra protections that salmonids deserve in the Outstanding State Resource Waters of Lake Michigan and its tributaries. However, we still fail to understand how this site specific calculation can be considered protective of the designated uses of the Grand Calumet River when 1) there are no seasonal variations in the water quality requirements that would be supportive of a "well balanced warm water fishery," and 2) Indiana's water quality standard for cyanide is not protective of common aquatic species to begin with.
Table 6-1 of 327 Indiana Administrative Code (IAC) 2-1-6 establishes Minimum Surface Water Quality Standards for the waters of Indiana. For free Cyanide, the Acute Aquatic Criterion (AAC) is established at 22 µg/L whereas the Chronic Aquatic Criteria (CAC) of 5.2 µg /L is established as the Continuous Criterion Concentration (CCC) for areas outside the mixing zone.

Long term exposures (greater than 60 days) to concentrations of 5.0 and 5.2 µg/l resulted in reducing and completely inhibiting spawning of bluegill (Smith et al. 1978, Smith et al. 1979, USEPA 1980). Leduc (1984) reported other chronic endpoints in several species of fish such as reduced egg production, reduced egg viability, and reduced swimming performance at concentrations ranging from 5-10 µg/l. It is clear from the outset that even before a site specific variance was created, water quality impairments are likely using this standard. The final free cyanide standard of 6 µg/l will not be protective of aquatic life.

We applaud IDEM in requiring toxicity testing for outfall 005 and outfall 034. With regards to outfall 005, previous studies did indicate that at least some effluents from the coke plant area were toxic to aquatic life. Garibay et al. (1996) presented a table entitled "summary table of acute toxicity tests with coke plant effluent," which documented significant acute mortality in fathead minnow, *Daphnia magna*, and *Ceriodaphnia dubia* utilizing effluent from a pilot-scale study of US Steel's coke plant. LC50 values of 55.4, 47.0 and 30.1 percent effluent were reported for these species, respectively. These LC50 values represent considerable dilutions while still exhibiting toxicity. Garibay et al. (1996) partially attributes this toxicity to the level of total dissolved solids also in the effluent. We look forward to seeing the results of this monitoring and specifically what corrective actions will be taken to eliminate toxicity in effluents to the Grand Calumet River.

With regards to outfall 034, we think this new effort at toxicity testing will be a positive step. However, there is another more pressing issue with regards to outfall 034 that we would like to see addressed immediately. On page 37 of the draft permit, effluent limitations for 034 are listed and this includes footnote # 10. Footnote # 10 refers to the narrative standards that are on page 54 of this draft permit. Item B.1.a. prohibits the discharge of settleable solids. Every time we have visited this outfall site (by land or by boat) over the course of the past 15 years (hundreds of times), visible solids are discharged from this outfall into the Grand Calumet River. In 1994 we wrote comments to IDEM on this permit listing more than 20 such dates. These occurrences are violations of this narrative standard and should be ceased. On a positive note, the small sheens of oil coming from outfall 034 seems to have abated somewhat in recent years.

**Conclusion**

We believe that IDEM is in error in granting a site-specific modification of the water quality standard for cyanide and we expect the required effluent toxicity testing to confirm this.

We appreciate this opportunity to assist IDEM in protecting this Nation's natural resources. If you have any questions regarding these comments, or require further technical assistance, please contact Dan Sparks of my staff at (812) 334-4261, extension 219.

Sincerely Yours,

Scott E. Pruitt
Supervisor

**Literature Cited**

Garibay, R., E. Godwin-Saad, S. Hall, and M. Rupnow. 1996. The aquatic toxicity and chemical forms of coke plant effluent cyanide -- implications for discharge limits. Poster presentation at the 17th Annual Society of Environmental Toxicology and Chemistry, 17-21 November, 1996. Washington, D.C.

Leduc, G. 1984. Cyanides in water: toxicological significance. Pages 153-224 *in* L.J. Weber, ed. Aquatic toxicology, Vol. 2. Raven Press, New York. (as cited in Eisler, R. 1991. Cyanide hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildl. Serv., Biol. Rep. 85(1.23). 55 pp.)

Smith, L.L., S.J. Broderius, D.M. Oseid, G.L. Kimball, W.M. Koenst. 1978. Acute toxicity of cyanide to freshwater fishes. Arch. Environ. Contam. Toxicol. 7:325-337.

Smith, L.L., S.J. Broderius, D.M. Oseid, G.L. Kimball, W.M. Koenst and D.T. Lind. 1979. Acute and chronic toxicity of HCN to fish and invertebrates. U.S. Environmental Protection Agency Rep. 600/3-79-009. 129 pp.

U.S. Environmental Protection Agency. 1980. Ambient water quality criteria for cyanides. EPA 44

Legal Environmental Aid Foundation of Indiana, Inc.
*Non-Profit Law Center for the Environment*

December 10, 2007

Ms. Mary A. Gade
Region 5 Administrator
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, Illinois 60604

Mr. David Soong
NPDES Programs Branch (WN-16J)
U.S. Environmental Protection Agency
Region 5
Chicago, Illinois 60604

**RE: U.S. Steel Corporation – Gary Works**
**NPDES Permit No: IN0000281**

Dear Ms. Gade and Mr. Soong:

On behalf of Save the Dunes Council, Hoosier Environmental Council, Natural Resources Defense Council, Indiana Wildlife Federation, Indiana Division of the Izaak Walton League of America, Environmental Law & Policy Center, Sierra Club-Hoosier Chapter, Alliance for the Great Lakes, League of Women Voters of Northwest Indiana, People Opposed to Wastewater Without Enough Review (POWWER), Environment Illinois and the Legal Environmental Aid Foundation of Indiana, thank you for granting our request for a public hearing pursuant to 40 C.F.R § 123.44 on EPA's objections to the draft renewal permit of U.S. Steel-Gary Works. We applaud EPA for promoting active public participation in the permitting process to ensure full implementation of the Clean Water Act's national goal of eliminating the discharge of pollutants into our nation's waters. We hope the hearing will provide all interested parties and the public with a meaningful opportunity to share their respective concerns with EPA regarding the U.S. Steel's draft permit for EPA's judicious consideration.

In that regard, all organizations represented herein fully support EPA's comments and objections to the U.S. Steel permit as detailed in EPA's letters to IDEM dated October 1, 2007 and October 16, 2007.[1] Additionally, we respectfully request that EPA modify its objections pursuant to 40 CFR 123.44(g) to address our additional concerns as follows:

**EPA Objection 1: Water Quality Based Effluent Limitations (Oct. 1, 2007)**

We support EPA's objection to WQBELs contained in the draft permit that are inappropriate or inconsistent with IDEM's reasonable potential determinations as set forth in

[1] *But see* our comment below with respect to EPA Objection 2 regarding USEPA's concern with technology based effluent limits for copper, lead and zinc at outfall 604 that are inconsistent with IDEM's determination of appropriate limits as set forth in Attachment III of the Fact Sheet. With respect to zinc, we not that the Attachment III limit is actually less stringent than the limit contained in the 1994 permit, such that imposition of the Attachment III limit would result in impermissible backsliding. Consequently, we do not support USEPA's objection in this regard.

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Attachment IV to the Fact Sheet for CBODs from outfall 034 and WET from outfalls 028/030 and 034. In addition, however, we ask EPA to expand and modify its objection to also require IDEM to clarify the method of calculation used to determine reasonable potential for all parameters listed in Attachment IV.

Specifically, based on a comparison between IDEM's reasonable potential to exceed analysis and U.S. Steel's 2000 TRI report, IDEM's analysis appears to account for only a small fraction of the annual aqueous effluents of mercury and cyanide that U.S. Steel has admitted it discharges. In its TRI report, U.S. Steel admitted discharging 100 lbs. of mercury per year, but IDEM's "reasonable potential" analysis accounts for only 2.34 lbs. per year. Similarly, the TRI report reflects an annual discharge of 14,000 lbs. of cyanide, but the IDEM analysis accounts for only 1,042 lbs. For the pollutants benzene, naphthalene, ammonia, manganese, lead, zinc and polycyclic aromatic hydrocarbons, IDEM's analysis indicates annual aqueous effluents that dramatically exceed what U.S. Steel has admitted to discharging in its TRI report. Accordingly, no final permit should be issued without a thorough explanation for these discrepancies including clarification by IDEM of its method and basis for RPE analysis.

**EPA Objection 2: Technology Based Effluent Limitations (Oct. 1, 2007)**

All organizations support EPA's concern and objection to technology based effluent limitations for copper, lead and zinc at Outfall 604 that are inconsistent with IDEM's determination of appropriate technology based effluent limits as set forth in Attachment III of the Fact Sheet. With respect to copper and lead, all organizations agree that, *at minimum*, the technology-based limits set forth in Attachment III should be incorporated into the permit. However, the limit for zinc set forth in Attachment III is actually less stringent than the limit contained in the 1994 permit, such that incorporation of the Attachment III limit for zinc would result in impermissible backsliding. Specifically, the 1994 permit limit for Outfall 034 was Average 34.98/Max 74.68 lbs/day, and the draft permit moved the toxicant limits to internal outfall 604 (which discharges to outfall 034), and set those limits at Average 20.2/Max 43.5 lbs./day. However, the Attachment III limit is Average 50.96/Max 100.93, clearly much higher than either the 1994 limits or the 2007 internal outfall 604 limits.

Additionally, we respectfully request EPA to expand and modify its objection regarding technology based effluent limitations to address IDEM's failure to impose such effluent limitations for copper and mercury and other pollutants pursuant to 40 CFR § 125.3, *et. seq.* Under the federal rule, BAT and BAT-BPJ effluent limitations should have been imposed in NPDES permits for U.S. Steel no later than March 31, 1989. However, the past permit and now the current draft permit allow U.S. Steel to discharge unlimited and unrestricted amounts of copper and mercury and other pollutants for up to 60 months after permit issuance - at the future expiration date of the permit - with no indication that U.S. Steel has applied for a Streamlined Mercury Variance. This cannot be construed as an effluent limitation or a determination using BAT-BPJ. IDEM failed to follow NPDES permitting requirements by issuing the last permit without copper or mercury effluent limits and now proposes to make the same impermissible decision again.

Mercury and copper are not the only pollutants for which IDEM has failed to set technology based effluent limitations at several outfalls in violation of 33 U.S.C. § 1311(b), 33 U.S.C. § 1342 and 40 CFR § 125.3. U.S. Steel's TRI reports list several chemical pollutants discharged to water in significant amounts that should have been subjected to an effluent limitation at a number of outfalls based on BAT-BPJ by the March 31, 1989 deadline. However, the draft permit allows uncontrolled release of arsenic, hexavalent chromium, cyanide compounds, lead compounds, manganese compounds, polycyclic aromatic hydrocarbons and nitrate compounds at some or all of the listed outfalls. Furthermore, several processes at the facility produce contaminants that require limits for iron (pickling processes and coal pile storage), phosphorus (boilerwater treatment additives), and brominated compounds (cooling water slimicide compounds may use bromine instead of chlorine). Accordingly, no final permit should be issued without imposing technology based effluent limitations for these pollutants as required by 40 CFR § 125.3.

**EPA Objection 3: Compliance Schedules (October 1, 2007)**

EPA's objection to five-year compliance schedules contained in the draft permit for achievement of WQBELs for benzo(a)pyrene at outfalls 005 and 010, free cyanide at outfall 005, chronic whole effluent toxicity at outfalls 005 and 034, copper at outfalls 018 and 040, zinc at outfall 040, ammonia at outfall 040 and mercury at several outfalls is fully supported by all organizations represented in this writing.

We request, however, that EPA expand its objection to the draft permit's five-year compliance schedules to include the following additional basis for the objection. Specifically, the prior permit for U.S. Steel expired on August 31, 1999 and failed to set effluent limits for numerous pollutant parameters as required by Great Lakes System water quality standards enacted by Indiana rule at 327 IAC 2-1.5, *et. seq.* in January, 1997, including absence of WQBELs for benzo(a)pyrene, cyanide, chronic whole effluent toxicity, copper, zinc and ammonia at various outfalls. By enacting the federal rule, EPA envisioned a potential 5 year period to achieve final compliance with GLS-WQBELs. EPA never intended that States would or could deliberately undermine the effectiveness of the rule by delaying permit renewal decisions in a manner to ultimately allow 13 year intervals after promulgation of Great Lakes System water quality standards for final compliance. However, the combined effect of IDEM's 8 year delay in issuing the draft permit with inclusion of five-year compliance schedules achieves that result and frustrates the purposes of the Clean Water Act.

U.S. Steel either knew or should have known that it would have to comply with more stringent WQBELs with the enactment of the Great Lakes system water quality standards by Indiana in 1997. There is no evidence that U.S. Steel needs five more years to fully comply with GLS-WQBELs. Accordingly, the final permit should not be issued without either removing the five year compliance provisions or providing a clear, practical need for such delays.

**EPA Objections 4 & 5: Antidegradation (October 1, 2007 and October 16. 2007)**

We support and share EPA's concern and objection to effluent limits in the draft permit that allow for increased discharges of zinc through internal outfall 603 and increased loadings of

total recoverable chromium through internal outfall 604 without demonstration that these limitations meet the antidegradation requirements of the State's water quality standards as required by 40 CFR §122.44(d) and 123.25(a)(14). However, we further request EPA to modify its objections with respect to antidegradation to address the following concerns.

IDEM removed the previous 1994 limits for total recoverable chromium of 29.77 lbs/day monthly average and 50.31 lbs/day daily maximum from the effluent limitations table for outfall 034. The draft permit places limits for total recoverable chromium at internal outfall 604 which flows through outfall 034 with no intervening wastewater treatment units to further reduce TRC after discharge at internal outfall 604. In addition, the new effluent limits at outfall 604 are 48.5 lbs/day monthly average and 78.5 lbs/day daily maximum thus allowing an increase and impermissible backsliding of 18.73 lbs/day for the monthly average and 28.19 lbs/day for the daily maximum. The annual increase of TRC effluents would be 6838 lbs/year thereby clearly triggering the CWA antidegradation requirements.

Furthermore, the Fact Sheet of the draft permit states that Oil & Grease effluent limits of 1500 lbs/day monthly average and 4000 lbs/day daily maximum based on BPJ are explicitly brought forward from the past permit. However, the effluent limitation table for outfall 034 in the draft permit provides a monthly average limit of 1850 lbs/day of oil and grease allowing a 350 lbs/day increase and a total annual impermissible backsliding amount of 63.9 tons of Oil & Grease to the Grand Calumet River. Considering the Grand Calumet River is currently in violation of WQS for Oil & Grease, this increase is illegal under the CWA under any circumstance. Thus, the draft permit cannot be issued until the allowance for increased discharges are eliminated or where appropriate antidegradation analysis has been completed.

**EPA Objection 6: Inclusion of Schedules for Achieving Compliance with Continuous Thermal Monitoring Requirements and Thermal Water Quality-Based Effluent Limitations**

All organizations fully support and agree with EPA's objection to the draft permit's inclusion of a one-year compliance period for achievement of continuous monitoring requirements for temperature of certain discharges and a three year compliance schedule for achievement of the thermal effluent limitations. However, we respectfully request that EPA modify its objection to not only eliminate the extended compliance periods but also ensure that all outfalls with thermal effluents under the draft permit have requirements for continuous monitoring for both temperature and heat discharge rate that are the same or similar as those for outfall 035. Specifically, only outfall 035 requires continuous monitoring for both temperature and heat discharge rate. All others generally require only 1X or 2X weekly monitoring of 6 grabs in a 24 hour period which is not sufficient to ensure compliance with effluent limits for temperature. Consequently, the draft permit should not be issued without addressing these concerns.

**EPA Objection 7: Cooling Water Intake Structures**

We support and agree with EPA's objection to the draft permit because it contains no requirement consistent with CWA § 316(b) that reflect the best technology available for

minimizing adverse environmental impact associated with U.S. Steel's existing facility cooling water intake structures and no explanation in the fact sheet as to why such requirements are not included. Accordingly, we agree that the draft permit should not be issued without requiring U.S. Steel to submit sufficient structural and practice information to determine what level of aquatic biological damage mitigation is occurring through engineering and analysis of the best available control technology appropriate for existing facilities.

**Additional Concerns Not Addressed by EPA's objections**

Although we share USEPA's concerns with the draft NPDES permit for U.S. Steel, USEPA's objections as detailed in its two letters do not address all several concerns shared by all represented organizations. Accordingly, we recommend that USEPA invoke its authority under 40 C.F.R. § 123.44(g) to modify the terms of its objection to require that the following problems be corrected and addressed in the draft permit as well.

1. The Impaired Watershed Status of the Grand Calumet River

The Grand Calumet River is identified on the Clean Water Act Section 303(d) listing for impaired water quality for ammonia, cyanide, oil and grease, mercury and impaired biotic communities. Additionally, IDEM has designated the headwaters of the Grand Calumet under CWA Section 303(d) as impaired for these pollutants and U.S. Steel-Gary Works is clearly a predominant polluter in this location. Indeed, the facility's discharges constitute virtually all of the volume of water flow in this location. However, IDEM has failed to properly address or consider the consequences of these impaired water quality designations and its subsequent responsibilities concerning the applicable regulatory requirements and how these requirements affect the current permitting decision.

IDEM's failures in this regard are detailed fully in comments submitted previously by the Natural Resources Defense Council, Environmental Law and Policy Center (*see* NRDC/ELPC joint comments pp. 25-27), Save the Dunes Council (*see* Save the Dunes comments pp. 1-3) and People Opposed to Wastewater Without Enough Review (*see* POWWER comment pp. 13-14). All of these problems must be remedied with revised permit provisions and additional information from U.S. Steel where appropriate before the final permit is issued. However, as these changes are carried out, EPA should enter into an agreed order with U.S. Steel setting a timetable for compliance with GL-WQS. There should be no further delay in achieving these standards merely because the draft permit is inadequate.

2. Stormwater Provisions of the Draft Permit Violate the Clean Water Act

All comments, concerns and objections raised by comments jointly submitted to IDEM by the Natural Resources Defense Council and the Environmental Law and Policy Center relating to: IDEM's failure to either review the SWPPP or disclose its contents to the public; IDEM's failure to substantively review the SWPPP; draft permit provisions that impermissibly undermine the BCT/BAT-BPJ requirements of the CWA; U.S. Steel's significant non-compliance with storm water monitoring and reporting requirements are adopted by all

organizations and incorporated fully herein (*see* NRDC/ELPC joint comments pp. 2-10). Accordingly, we respectfully request that EPA address each and every one of these concerns before the draft permit is finalized.

3. Review of Complete Record of the Permit Proceedings Before the State Necessary to Determine Whether the Draft Permit Complies with the Clean Water Act

Due to inadequacies in information made available to the public, and to ensure adequate agency and public oversight of the permitting process, we respectfully request USEPA invoke its power under 40 CFR § 123.44(d)(2) and require IDEM to transmit the complete record of the permit proceedings before the State for USEPA's review.

**Conclusion:**

This concludes our comments on EPA's objections to the draft renewal NPDES permit of U.S. Steel. We thank you for your consideration and look forward to the public hearing of December 11, 2007.

Very truly yours,

Kim Ferraro

Kim Ferraro
Executive Director, LEAF of Indiana, Inc.
Board Member, Save the Dunes Council
Board Member, Hoosier Environmental Council
Contact Member, POWWER

cc. Stephen L. Johnson, Administrator, U.S. Environmental Protection Agency
Peter Swenson, Branch Chief, NPDES Programs Branch, U.S. EPA
Stan Rigney, IDEM, Office of Water Quality/ Industrial NPDES Permits Section
Kenneth Mentzel, Manager of Environmental Control, U.S. Steel-Gary Works
Ann Alexander, Senior Staff Attorney, Natural Resources Defense Council
Albert Ettinger, Senior Staff Attorney, Environmental Law & Policy Center
Tom Anderson, Executive Director, Save the Dunes Council
Lyman C. Welch, Manager Water Quality Program, Alliance for the Great Lakes
Jesse Kharbanda, Executive Director, Hoosier Environmental Council
Max Muller, Environment Illinois
Jeanette Neagu, League of Women Voters of Northwest Indiana
Chuck Siar, President, Izaac Walton League of America, Indiana Division
John Goss, Executive Director, Indiana Wildlife Federation
Glenn Pratt, Chair Conservation Committee, Sierra Club - Hoosier Chapter

City of Chicago
Richard M. Daley, Mayor

Department of Environment

Suzanne Malec-McKenna
Commissioner

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December 28, 2007

Mr. David Soong
NPDES Program Branch
EPA Region V
77 W. Jackson Blvd.
Chicago, IL 60604

**RE: U.S. Steel Corporation Gary Works - Gary, Indiana**
**Draft NPDES Permit No: IN0000281**

Dear Mr. Soong:

The City of Chicago Departments of Environment and Water Management and the Chicago Park District submitted a letter to the Indiana Department of Environmental Management (IDEM) on October 1, 2007. The letter includes our comments on the U.S. Steel Corporation Gary Works draft NPDES Permit. I am sharing this letter with you for your information.

We greatly appreciate USEPA's thoughtful approach to this permit's review. As always, thank you to the agency for your continued efforts to protect Great Lakes water quality.

Sincerely,

Suzanne Malec-McKenna
Commissioner

cc: Mary Gade, Regional Administrator

Attachment: October 1, 2007 letter to IDEM

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Richard M. Daley, Mayor

Department of Environment

Suzanne Malec-McKenna
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October 1, 2007

Mr. Stan Rigney
Indiana Department of Environmental Management (IDEM)
Office of Water Quality
Industrial NPDES Permits Section
MC 65-42 IGCN Room 1255
100 North Senate Avenue
Indianapolis, IN 46204-2251

Fax: (317) 233-6647
Email: srigney@idem.in.gov.

RE: Public Comment on Draft Permit IN 0000281
U.S. Steel - Gary Works - United States Steel Corporation

On behalf of the City of Chicago and the Chicago Park District, we submit the following comments on the US Steel Gary Works Draft NPDES Permit IN 0000281 (2007 Draft Permit). We agree with the substance of the Natural Resources Defense Council and the Illinois Attorney General's Office's comments and in particular want to emphasize our concern about the following:

1. **The compliance schedule is not aggressive enough.** IDEM should create and justify an accelerated compliance schedule. The 2007 Draft Permit offers no justification for giving U.S. Steel until 2012 to come into compliance with standards the company should have met in 1999. Granting U.S. Steel a 13-year grace period runs counter to the Great Lakes Systems Water Quality Standards adopted by Indiana in 1997 (GLI standards) and the U.S. Environmental Protection Agency's final rule, issued in 2002, establishing technology-based limitations for wastewater discharges for the iron and steel manufacturing industry. The federal rule expressly requires that NPDES permits, new and reissued, include such limitations.
    a. The 2007 Draft Permit effectively imposes *no* effluent limitations at various outfalls for several pollutants, including benzo(a)pyrene, cyanide, chronic whole effluent toxicity, copper, zinc and ammonia, giving U.S. Steel the entire duration of the reissued permit to comply with the applicable limitations.
    b. The 2007 Draft Permit grants U.S. Steel an additional 5 years to comply with the GLI standards for pollutants such as mercury, excusing compliance with those standards for a total of 13 years after they were promulgated – even though the GLI standards

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were in effect prior to the termination of U.S. Steel's permit issued in 1994.

c. Neither the 2007 Draft Permit nor the associated fact sheet provide any basis for concluding that U.S. Steel has demonstrated, as Indiana law requires, that five years is a reasonable period of time to delay compliance with applicable effluent limitations. As discussed in the Illinois Attorney General's Office's comments, the sole supporting statement identified in the fact sheet could at most provide support only for the first 12-month delay period, not the subsequent four years of the compliance schedule.

d. The 2007 Draft Permit's compliance schedules for the relevant pollutants, including mercury, constitute de facto variances from the applicable effluent limitations. There is, however, no indication in the fact sheet or 2007 Draft Permit that U.S. Steel has applied for or met the requirements for a Streamlined Mercury Variance or any other variance.

e. US Steel has failed to provide a legitimate justification for this 13-year grace period and should not only justify it, but accelerate it.

2. **The 2007 Draft Permit does not appear to comply with other Federal and state water-quality standards**. Of particular concern are the following:
   a. Backsliding on discharges for ammonia (outfalls 018 & 019) cyanide (outfall 005/010), and oil and grease (outfall 005/010).
   b. The absence of an anti-degradation review for benzene (200/005), fluoride (005), and total recoverable chromium (034).
   c. The use of mixing zones for determination of mercury WQBELs on new/expanded discharges into the Great Lakes.

3. **The 2007 Draft Permit appears to lack technology based standards for stormwater and certain industrial processes.** Such processes include freeze protection wastewater and leachate from SWD-1 landfill.

4. **IDEM has not disclosed contents of the Stormwater Pollution Prevention Plan.** This deprives the public an opportunity to review for compliance with NPDES requirements.

5. **Based on the 2007 Draft Permit, IDEM does not appear to have considered in its analysis all chemical pollutants that may contribute to water quality exceedances per 327 IAC 5-2-11.5.** These include arsenic, sulfates, total dissolved solids and other substances. In its Toxics Inventory Report to USEPA, (data source: Release Year 2005 PDR data set frozen on November 15, 2006), US Steel reported to have discharged over 496 pounds of arsenic into surface waters.

6. **The 2007 Draft Permit fails to take U.S. Steel's compliance history**

**into account.** Despite the company's history of compliance problems, the 2007 Draft Permit relaxes monitoring requirements for pollutants such as benzene benzo(a)pyrene, naphthalene, phenols, ammonia as nitorgen, total free cyanide and other chemicals of concern at outfalls 501, 005, 010, and other outfalls.

If you should have any questions concerning these comments, please do not hesitate to contact us, Ms. Malec-McKenna, (312) 744-7468, or Mr. Mitchell, (312) 742-4200. We look forward to discussing these issues with IDEM and to a resolution that is protective of the region's surface waters as intended by the Clean Water Act and the Great Lakes Initiative. Thank you for your consideration of these comments.

Sincerely,

Suzanne E. Malec-McKenna
Commissioner
Chicago Department of Environment

Timothy J. Mitchell
General Superintendent & CEO
Chicago Park District

cc: (by email)
Mary Gade, USEPA Region V
Matt Dunn, Illinois Attorney General's Office
Henry Henderson, Natural Resources Defense Council

United States Department of the Interior

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IN REPLY REFER TO:

TAKE PRIDE IN AMERICA

March 21, 1994

Mr. Lonnie Brumfield, Chief
Permits Section
Office of Water Management
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46206-6015

Dear Mr. Brumfield:

This regards the National Pollutant Discharge Elimination System (NPDES) permit number IN 0000281, for U.S. Steel - Gary Works, in Gary, Lake County, Indiana.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the Clean Water Act of 1977 (P.L. 92-500), as amended.

This is a very complex permit based on federal Clean Water Act regulations at 40 CFR, Indiana regulations at 327 IAC (Indiana Water Quality Standards), a consent decree (No. H88-558) between the U.S. Environmental Protection Agency (EPA) and USX Corporation, past permit limits, and frequently, best professional judgement. This permit requires monitoring of non-contact cooling water discharges, chemicals and toxic metals monitoring, sediment chemistry monitoring, effluent and sediment toxicity testing, and implementation of an oil and grease monitoring plan. Additional process changes are planned to minimize the plant's non-point source pollution inputs to the river, and changes to plant processes to reduce or eliminate pollution to the river. Many of the monitoring and toxicity testing are complemented by permit reopener clauses to address problems should they be detected. We are hopeful that permit modifications will be taken swiftly to rectify any problems in the event that any are found through these monitoring efforts.

I.N. Additional Requirements

This section of the permit states that "the discharge shall be free of floating and settleable solids" and "the discharge shall not contain oil or other substances in amounts sufficient to create a visible sheen on the receiving waters." These requirements appear to apply to all the active outfalls, including 034.

From approximately mid-April through June, 1993, biologists from our office were conducting biological studies on the Grand Calumet River and related areas. These activities included almost daily boat trips along at least portions of the Grand Calumet. On many occasions between April 26 and May 6, 1993 we observed common mergansers that had gotten oiled to the the extent that they could not fly, apparently from contact with the Grand Calumet River sediments while foraging. Due

to past pollution and contaminated sediments, there are constant sheens of oil on the Grand Calumet River. We are concerned that the river's assimilative capacity was exceeded long ago and the continued permitted discharges of more than 1.5 tons per day of oil and grease is likely excessive. Consideration of site-specific standards may be appropriate.

On May 19, 1993 we first observed the discharge of 034 to contain a light sheen of oil and large +3" flocculus suspended in the water column. The flocculus could be seen in the water column at least as far downstream as Industrial Highway bridge, where they were first observed. Additional observations were made on outfall 034 on May 20, June 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 21, 22, 24, 27, 29, and 30, 1993. These observations found that the light sheen and flocculus occurred to varying degrees on every observation. These observations are in apparent conflict with the previously-listed permit requirements. We recommend that additional measures be taken to ensure that outfall 034 meets these permit requirements.

III.F. Oil and Grease Monitoring

This section of the permit requires that the permittee implement the visible oil corrective action and monitoring program described in "Visible Oil Corrective Action Monitoring Plan " (Final Report; August 3, 1990; Gary Works, USS Division of USX Corp.; Eichleay Engineers, Inc., EEI Project No. 9490-5). Outfalls included in this monitoring program include: 005, 007, 010, 015, 017, 018, 019, 020, 030, 033, 035, 036, and 037. This monitoring program should monitor 034, especially considering the aforementioned data presented and the fact that there are several oil/water separators on this wastewater process line prior to discharge to the Grand Calumet River.

We appreciate the opportunity to comment on proposed NPDES permits and look forward to continuing coordination with your agency to protect our Nation's natural resources. If you have any questions or require further technical assistance, please contact Dan Sparks of my staff at (812) 334-4261, extension 219.

Sincerely yours,

David C. Hudak
Supervisor

cc: U.S. Environmental Protection Agency - R. Kovach (WC-15J)
Regional Director, FWS, Twin Cities, MN (FWE-EC)
Indiana Department of Natural Resources, Indianapolis, IN (W. Faatz)

OFFICE OF THE ATTORNEY GENERAL
STATE OF ILLINOIS

Lisa Madigan
ATTORNEY GENERAL

December 27, 2007

David Soong
NPDES Program Branch
EPA Region 5 (mail code WN-16J)
77 W. Jackson Blvd.
Chicago, IL 60604

**Re: Comments on USEPA's Objections to Draft NPDES Permit IN 0000281 for U.S. Steel Gary Works Issued by IDEM on July 2, 2007**

On behalf of the People of the State of Illinois by and through Illinois Attorney General Lisa Madigan, we would like to thank the United States Environmental Protection Agency ("USEPA") Region V Administrator Mary Gade for making possible the public hearing held on December 11, 2007 and for this opportunity to offer our written comments to the USEPA regarding our objections to the draft National Pollutant Discharge Elimination System ("NPDES") permit IN 0000281 for United States Steel Corporation ("U.S. Steel"), Gary Works, issued by the Indiana Department of Environmental Management ("IDEM") on July 2, 2007.

We would like to commend the USEPA for its recognition of the significant deficiencies in the U.S. Steel draft permit and for raising its objections to the issuance of the draft permit as articulated in its October 1, 2007 and October 16, 2007 letters.

The People of the State of Illinois have a compelling interest in preventing the discharge of inadequately treated process wastewater into the Grand Calumet River, an interstate body of water that flows into Illinois from Indiana. The Grand Calumet River is also tributary to Lake Michigan, a navigable water of the United States and an Outstanding State Resource Water, as designated by Indiana Law. The People of the State of Illinois also have a compelling interest in monitoring the discharge of wastewater directly or indirectly into Lake Michigan, a resource that Illinois and Indiana share.

The U.S. Steel Gary Works facility draft permit fails to follow federal NPDES guidelines. Neither the draft permit nor the fact sheet provides sufficient information to support the proposed compliance schedules, the level of proposed effluent discharge authorized by the draft permit or what effect such discharges will have on the Grand Calumet River and Lake Michigan.

## I. Facility and Receiving Waters

The U.S. Steel Gary Works facility is the largest fully integrated steel mill in North America, with a capacity to produce over 8 million tons of raw steel per year.

The receiving waters of the discharge from the facility are the Grand Calumet River, Lake Michigan and Stockton Pond. A majority of the outfalls discharge into the Grand Calumet River, an interstate waterway, at Gary, Indiana and flow in a westerly direction into the State of Illinois, and also into Lake Michigan via a canal at Hammond, Indiana. The People of the State of Illinois are the recipient of the pollutants in the water being transported by the Grand Calumet River from the U.S. Steel Gary Works.

The Gary Works facility is regulated by the Clean Water Act ("CWA") and the regulations found at 40 CFR 420 for the Iron and Steel Manufacturing Point Source Category, and under 40 CFR 433 for the Metal Finishing Point Source Category. It is also regulated by the applicable Indiana Administrative Code's environmental regulations.

## II. Compliance with Current Effluent Standards

The U.S. Steel Gary Works facility has been operating on the same 5 year permit, issued September 1, 1994, for 13 years. U.S. Steel has been operating on effluent standards that are at least 8 years out of date. In the intervening time, the Great Lakes System water quality standards were enacted by Indiana rule in January 1997, and, on October 17, 2002, the USEPA issued its final rule revising the CWA effluent limitations guidelines and standards for wastewater discharges from the iron and steel manufacturing industry (attached). Indeed, U.S. Steel's current permit does not impose any limits upon many important pollutants, such as benzo(a)pyrene, cyanide, chronic whole effluent toxicity copper, zinc and ammonia.

Despite this long delay in applying these standards, now in place for over 10 years, U.S. Steel seeks to stave off the application of these standards for another 5 years. While Section 12.1(b) of Indiana's NPDES rules states that a permit "may allow a reasonable period of time, up to five (5) years...for permittee to comply" with changed effluent limitations, any compliance schedule delaying the application of current effluent limitations to U.S. Steel is contrary to law and unreasonable. 327 IAC 5-2-12.1(b)(filed Jan. 14, 1997, errata filed Aug. 11, 1997). First, subsequent federal rules expressly state that all new and reissued NPDES permits require immediate compliance with the current effluent limitations. Second, even setting aside the federal guidance, U.S. Steel has not demonstrated the reasonableness of delaying its compliance as required by the Indiana NPDES rules.

### 1. Immediate Compliance

On October 17, 2002, USEPA issued its final rule revising the CWA effluent limitations guidelines and standards for wastewater discharges from the iron and steel manufacturing industry. 67 FR 64216, October 17, 2002. Promulgated pursuant to the CWA, this final rule required that:

> Existing direct dischargers must comply with limitations based on the best practicable control technology currently available (BPT), the best conventional pollutant control technology (BCT), and the best available technology

> economically achievable (BAT) as soon as their [NPDES] permits include such limitations.

67 FR 64216, October 17, 2002, and further stated:

> New and reissued Federal and State NPDES permits to direct dischargers must include the effluent limitations promulgated today. The permits must require immediate compliance with such limitations. If the permitting authority wishes to provide a compliance schedule, it must do so through an enforcement mechanism.

67 FR 64253, October 17, 2002. U.S. Steel's application for a reissue of its state NPDES permit places it within this rule, and prevents the inclusion of a compliance schedule in U.S. Steel's NPDES permit. 327 IAC 5-207 ("No permit shall be issued... [w]here the terms or conditions of the permit do not comply with the applicable guidelines and requirements of the CWA or this article").

**2. Unreasonable Delay in Compliance**

Even where, despite the federal guidelines, IDEM elects to include a compliance schedule in the NPDES permit, the draft permit and fact sheet do not demonstrate that such a compliance schedule is reasonably required. Rather than employing the compliance schedule provision of the NPDES rules as a temporary, discretionary variance from the proper effluent limits, the U.S. Steel draft permit appears to treat the 5 year statutory maximum as a default duration requiring no explanation.

On January 14, 1997, the Indiana Water Quality Standards rules adopted the Great Lakes System Water Quality Standards. These standards were in place when U.S. Steel's 1994 NPDES permit was to expire. In fact, U.S. Steel filed for renewal of its NPDES permit prior to the 5 year expiration date in 1999. Now that this NPDES permit renewal is finally before IDEM, U.S. Steel has been aware of these Great Lakes System Water Quality Standards for over 10 years.

Pursuant to Section 12.1(b) of Indiana's NPDES rules, permits issued to existing Great Lakes dischargers "may allow a reasonable period of time, up to five (5) years...for permittee to comply" with new or more restrictive water quality based effluent limitations. 327 IAC 5-2-12.1(b)(emphasis added). The inclusion of the term "reasonable" in that provision imposes an obligation upon U.S. Steel to demonstrate reasonableness and upon IDEM to determine whether U.S. Steel's proposed compliance schedule or any further delay in compliance is indeed reasonable. Prior to its 2002 guidance, the USEPA stated "[i]n general, Congress intended compliance with the [Clean Water] Act's requirements to occur at the earliest practicable time." USEPA, Request for a Legal Opinion – Inclusion of Compliance Schedules in Second Round Permits and Newly issued Permits – Your Memo of November 2, 1978, December 1978, <www.epa.gov/npdes/pubs/owm541.pdf>.

The regulated communities have had more than ample time to develop and implement the identified control technologies for the specific point source categories or subcategories listed in

the CFRs. U.S. Steel has already had 10 years to prepare for the imposition of these effluent limitations to its facility. U.S. Steel cannot now argue that the earliest practicable time to comply with these decade old effluent limitations is 5 years in the future. There is no reasonable period of time after the effective date of the NPDES permit that U.S. Steel should be permitted to continue to avoid these effluent limitations.

Neither the draft permit nor the fact sheet provide any basis by which U.S. Steel has demonstrated that 5 years is a reasonable period of time to delay full compliance. The only support provided for the requested 5 year compliance schedule is the statement "US Steel has indicated in correspondence submitted that additional time will be required to do additional sampling." U.S. Steel Fact Sheet at 45. This statement is incomplete and does not support the proposed 5 year compliance schedule.

First, there is no showing that additional sampling is required to meet the effluent limits. Second, this statement could only provide support for the permit's first 12-month period to provide "a description of the method(s) selected for meeting the newly imposed limitations." Draft Permit at 61. There is no support of any kind offered in the draft permit or fact sheet for the subsequent 4 years of the compliance schedule. IDEM appears to assume, without any stated reason, that U.S. Steel's method for meeting the effluent standards will take the maximum time provided for in the Indiana NPDES rules.

Rather than a reasonable time period to comply, U.S. Steel appears to use this 5 year maximum compliance schedule to extend compliance continuously into the future. U.S. Steel's permit history with benzo(a)pyrene demonstrates this practice. As stated in the fact sheet, "[a]s part of the 1998 Coke Plant modification, U.S. Steel was given a five year compliance schedule to meet the final effluent limitations" for benzo(a)pyrene by 2003. Fact Sheet at 25. While there is no indication to what degree U.S. Steel ever met those effluent limits, in March 2000, U.S. Steel submitted studies, which then IDEM used to recalculate the final limits for benzo(a)pyrene. Now, the draft permit grants U.S. Steel yet another five year compliance schedule to meet these new effluent limits for benzo(a)pyrene.

### 3. Compliance Schedule is a de facto Variance

In addition to the unreasonableness of the five-year compliance schedule, U.S. Steel is in effect requesting a de facto variance from the effluent limits for the relevant pollutants, including mercury. The five year NPDES permit only applies the current effluent standards on the day that it expires, deferring the standards for the entire duration of the permit. As stated above, U.S. Steel's draft permit and fact sheet do not provide sufficient information to demonstrate such a compliance schedule is reasonable. The Streamlined Mercury Variance Requirements and Application Process is similarly not satisfied by U.S. Steel.

The Indiana Water Quality Standards rules impose specific information requirements and procedures upon any facility seeking a variance from a NPDES permit mercury discharge limitation. 327 IAC 5-3.5-4. The facility must specifically apply for the variance and include a

pollutant minimization program plan (PMPP) and all of the information required for that plan under the Indiana rules, whereafter IDEM shall publish the application for public comment.

U.S. Steel cannot obtain a mercury variance without meeting these requirements and submitting itself to these procedures. Calling that variance a compliance schedule does not change the requirements of Indiana Water Quality Standards rules. U.S. Steel did not meet these requirements, therefore it cannot obtain a streamlined mercury variance. Nor can U.S. Steel be granted a five-year compliance schedule, which similarly shields U.S. Steel from current mercury limitations. The variance requirements and procedures for the other compliance schedule pollutants are even more stringent. 327 IAC 2-1.5-17; 327 IAC 5-3-4.1.

For all of these reasons, it is illegal and improper to include a five-year compliance schedule for any current effluent limitation in U.S. Steel's NPDES permit.

## III. USEPA'S OBJECTIONS

We concur with the USEPA's objections set forth in its October 1, 2007 letter stating that the 5 year compliance schedule for achievement of water quality-based effluent limitations ("WQBELs") contained in the draft permit are unsupported. We also agree with the USEPA's objections set forth in its October 16, 2007 letter stating that inclusion of schedules for achieving compliance with continuous thermal monitoring requirements and thermal WQBELs is unsupported. In fact there is no indication that US Steel cannot currently meet these requirements.

In both of its objection letters, the USEPA raised concerns that the draft permit failed to demonstrate that the effluent limitations for several pollutants from at least two internal outfalls in the permit met the antidegradation requirements of Indiana's water quality standards. We fully support the USEPA's position on this important water quality issue.

In its October 1, 2007 letter, the USEPA took issue with the draft permit's proposed water quality-based effluent limitations for discharges from various outfalls of carbonaceous biochemical oxygen demand ($CBOD_5$) and whole effluent toxicity. Also in the same letter the USEPA raised objections to the draft permit's proposed technology based effluent limitations. Specifically, there were discrepancies between the fact sheet and the draft permit for monthly average load limitations for copper, lead, and zinc, as well as the daily maximum load limitations for lead and zinc. We are in accord with the objections raised by USEPA on the effluent limitations in the draft permit.

Finally, the USEPA objected to the draft permit's failure to require U.S. Steel to employ the best technology available to minimize the adverse environmental impacts associated with its cooling water intake structures. We are in agreement with the USEPA's objections on this issue.

## IV. Additional Comments

The People of the State of Illinois concur with the comments and recommendations of the Natural Resource Defense Counsel, previously filed with IDEM on October 1, 2007 (attached), regarding the U.S. Steel NPDES draft permit no. IN 0000281.

## V. Conclusion

In sum, Illinois Attorney General Lisa Madigan on behalf of the People of the State of Illinois, objects to the compliance schedules in the draft permit and also concurs in the USEPA's objections raised in its October 1st and 16th letters regarding the draft NPDES permit for U.S. Steel's Gary Works. Further, we concur with the comments and recommendations of the Natural Resource Defense Counsel, previously filed with IDEM on October 1, 2007. The NPDES permit should not be issued to U.S. Steel until the deficiencies identified have been fully remedied.

Sincerely,

PEOPLE OF THE STATE OF ILLINOIS,
by LISA MADIGAN, Attorney General of
the State of Illinois

MATTHEW J. DUNN, Chief
Environmental Enforcement/
Asbestos Litigation Division

By: Rosemarie Cazeau/rb
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United States Steel Corporation
Gary Works, E.C. Tin & Midwest Plant
One North Broadway
Gary, IN 46402
219-888-4220
Fax: 219-888-4314

Michael S. Williams
General Manager



December 18, 2007

Mr. David Soong
NPDES Program Branch
EPA Region 5
77 W. Jackson Boulevard
Chicago, IL 60604

Dear Mr. Soong:

Attached is a written copy of my comments given at the hearing on December 11, which U.S. Steel submits for consideration along with other comments U.S. Steel submitted to IDEM pertaining to the renewal of this permit.

Sincerely,

MS Williams
Michael S. Williams
General Manager

MSW:cfj

Enclosure

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Michael S. Williams
General Manager

# Mike Williams Testimony at EPA Gary Water Hearing

December 11, 2007

Good afternoon. My name is Mike Williams, and I'm general manager of U. S. Steel Gary Works. On behalf of my 7,000 coworkers, thank you for the opportunity to speak here today.

Gary Works is U. S. Steel's largest plant and the largest steelmaking facility in North America. Since its inception in 1906, it has been central to the economic vitality of Northwest Indiana. Wages earned at Gary have allowed generations of men and women to provide for their families and realize the American dream.

Environmental stewardship is a core value at U. S. Steel, and since the 1970s – when the federal Clean Air and Clean Water Acts became law – we have invested hundreds of millions of dollars in technology to meet increasingly strict environmental requirements. Gary Works' environmental performance is exceptional – 99.9 percent compliance with our water permit. 100 percent is our goal. Thousands of U. S. Steel families live in the communities around our plant and breathe the air and drink the water.

Gary Works draft water permit was developed in strict conformance with all water quality criteria specific to the Great Lakes Basin and seeks no increases in discharges. To the contrary, the permit we are discussing today is more stringent than the NPDES permit currently in effect. The overall mass discharged measured in pounds -per-day is less than that currently allowed and will result in a net discharge reduction. The rules used to write the permit were developed through a public process that conforms to USEPA's Great Lakes Water Quality Initiative, which includes some of the strictest water quality requirements in the U.S.

We are committed to full environmental compliance. We will continue to work with IDEM in their important mission to protect human health and the Lake Michigan aquatic environment. We expect the conditions of the final permit to further improve the water quality in Lake Michigan and the Grand Calumet River, a goal that we share with the community.

MS Williams

Michael S. Williams

United States Steel Corporation – Gary Works
One North Broadway – MS 70-A
GARY, IN 46402



*Via Certified Mail and Electronic Mail*

December 20, 2007

Mr. David Soong
NPDES Programs Branch (WN-16J)
US EPA Region 5
77 W. Jackson Blvd.
Chicago, IL 60604-3590

**RE: United States Steel Corporation – Gary Works**
**EPA Objections Regarding Draft NPDES Permit IN0000281**

Dear Mr. Soong:

United States Steel Corporation – Gary Works (USS) would like to provide you with the attached responses to the issues raised in the EPA objection letters dated October 1, 2007 and October 16, 2007. These responses have been shared with the Indiana Department of Environmental Management (IDEM). In addition, USS provided IDEM with a copy of its 316(b) demonstration, entitled *U. S. Steel Corporation Gary Works Fish Impingement – Entrainment Study Summary Data Report* (Feb. 1978).

Please feel free to contact Mardanna Soto, Water Compliance Manager, at (219) 888-3369 or via electronic mail at MDSoto@uss.com if you have any questions or need additional information.

Sincerely,

Kenneth L. Mentzel
Manager – Environmental Control
United States Steel Corporation

Enclosure

cc: *Via Electronic Mail*
T. Easterly – IDEM
S. Rigney – IDEM
M. S. Williams – USS
C. D. Baker – USS
K. T. Stetter – USS
R. L . Garibay – Advent-Environ
E. Powers – Barnes & Thornburg LLP

# U. S. Steel – Gary Works
## Responses to EPA Objection Letters

### I. CBOD5 Limits at Outfall 034

The current and draft permit limits for CBOD5 are based on the mass values established by the Wasteload Allocation of Grand Calumet River – Indiana Harbor Ship Canal, September 1991 (the WLA). Control of CBOD5 is related to achieving appropriate dissolved oxygen concentrations to assure attainment of the dissolved oxygen criteria. The WLA limited the load (mass) of CBOD5 at USS Outfall 034 to assure meeting the in-stream dissolved oxygen criteria. The concentration of $cBOD_5$ in the Outfall 034 is an not input in determining whether the in-stream dissolved oxygen criteria are attained nor is there a specific water quality criterion for $cBOD_5$ based on protecting aquatic life or human health.

As a result, it was not proper to conduct an RPE calculation based on concentration for $cBOD_5$. Therefore, Table 10 of Attachment IV to the draft fact sheet is incorrect. The mass limits of 1334 lbs/day as a monthly average and 2669 lbs/day as a daily maximum during the summer months, and 4537 lbs/day as a monthly average and 9074 lbs/day as a daily maximum during winter months is consistent with the allocation assigned in the WLA to Outfall 034, and are sufficiently stringent to achieve dissolved oxygen criteria. Concentration-based limits are not required.

### II. Chronic WET Limit at Outfalls 028/030

In its August 1999 NPDES Permit Renewal Application, USS submitted and certified WET data from 1996 as valid and representative data for Outfalls 028/030 (and Outfall 034) that should be used in developing its limits and conditions for the renewed permit. Data from 1994 and 1995 were not considered representative, particularly for those outfalls subject to compliance schedules after issuance like Outfalls 028/030.

First, the data prior to 1996 does not meet the specific permit application requirement that reads:

> "Do you have any knowledge or reason that any biological test for acute or chronic toxicity has been made on any of your discharges or on receiving water in relation to your discharge within **the past 3 years**?" **(emphasis added)**

Second, IDEM appears to favor using the past two years of data to characterize effluent for the purpose of water quality-based effluent permitting:

> 327 IAC 5-2-11.4(a)(9) The effluent flow used to develop TMDLs, WLAs calculated in the absence of a TMDL, and preliminary WLAs shall be determined as follows:
> ...
> (B) For industrial dischargers, the highest monthly average flow from **the previous two (2)** years of monitoring shall be used. **(emphasis added**

Using the representative WET data, there is no RPE for Outfalls 028/030, and no limit is required. Table 15 of Attachment IV should be revised to exclude the non-representative data from the RPE calculation.

## III. Chronic WET Limits at Outfall 034

Table 15 of Attachment IV contained a typographical error. The WQBEL column should indicate that the WET limit is 3.3 TUc, based on the WLA, rather than 3.1 TUc. Therefore, the limit at Outfall 034 is correct.

## IV. TBELs for Outfall 604

USS agrees that appropriate TBELs should be included for Outfall 604

## V. Compliance Schedules

*ASSESSMENT OF COMPLIANCE – CHEMICAL-SPECIFIC WQBELS*

Benzo(a)pyrene (BaP) for Outfalls 005 and 010

US Steel cannot currently comply with the draft final daily maximum concentration, daily maximum mass, monthly average concentration, or monthly average concentration limits for BaP at Outfalls 005 and 010. The current limit in effect for Outfall 200 (the bubble of Outfall 005 and 010) is 1 µg/L as a daily maximum; there are no other limits. By way of comparison, the draft final concentration limits for Outfall 005 and 010 are 0.22 µg/L (daily maximum) and 0.091 µg/L (monthly average). Based on 2007 discharge monitoring data reported to IDEM, the maximum monthly average concentration for Outfall 005 is 0.25 µg/L and for Outfall 010 it is 0.089 µg/L and the daily maximum concentration for Outfall 005 is 0.99 µg/L and for Outfall 010 is 0.16 µg/L.

Copper for Outfall 018 and Outfall 040

US Steel cannot currently comply with the draft final daily maximum concentration, daily maximum mass, monthly average concentration, or monthly average concentration limits for copper at Outfalls 018 and Outfall 040. There are no current limits for copper at these outfalls. The draft final concentration limits for Outfall 018 is 27 µg/L (daily maximum) and 13 µg/L (monthly average) and Outfall 040 is 21 µg/L (daily maximum) and 13 µg/L (monthly average). From data generated by US Steel during the Permit Renewal process, the projected effluent quality for copper at Outfall 018 is 127 µg/L (daily maximum) and 134 µg/L (monthly average) as presented in Attachment IV Table 6. From data generated by US Steel during the Permit Renewal process, the projected effluent quality for copper at Outfall 040 is 44 µg/L (daily maximum) and 59 µg/L (monthly average) as presented Attachment IV Table 14.

Ammonia and Zinc for Outfall 040

US Steel cannot currently comply with the draft final daily maximum concentration, daily maximum mass, monthly average concentration, or monthly average concentration limits for ammonia and zinc at Outfall 040. There are no current limits for ammonia and zinc at Outfall 040. The draft final concentration limits for ammonia is 360 µg/L (daily maximum) and 220 µg/L (monthly average) and for zinc is 170 µg/L (daily maximum) and 84 µg/L (monthly average). From data generated by US Steel during the Permit Renewal process, the projected effluent quality for ammonia is 990 µg/L (daily maximum) and 990 µg/L (monthly average) as presented in Attachment IV Table 14. From data generated by US Steel during the Permit Renewal process, the projected

effluent quality for zinc is 13,062 µg/L (daily maximum) and 13,062 µg/L (monthly average) as presented in Attachment IV Table 14.

Mercury for Outfalls 005, 010, 015, 018, 019, 020, 028/030, and 034

US Steel cannot currently comply with the draft final daily maximum concentration, daily maximum mass, monthly average concentration, or monthly average concentration limits for mercury at Outfalls 005, 010, 015, 018, 019, 020, 028/030, and 034. There are no current limits for mercury at these outfalls. The draft final concentration limits for mercury is 0.0032 µg/L (daily maximum) and 0.0013 µg/L (monthly average). From data generated by US Steel during the Permit Renewal process, the projected effluent quality for mercury at the outfalls is (as presented in Attachment IV tables):

| | Daily Maximum | Monthly Average |
|---|---|---|
| Outfall 005 | 0.00707 µg/L | 0.00707 µg/L |
| Outfall 010 | 0.00578 µg/L | 0.00578 µg/L |
| Outfall 015 | 0.00612 µg/L | 0.00612 µg/L |
| Outfall 018 | 0.00593 µg/L | 0.00593 µg/L |
| Outfall 019 | 0.00726 µg/L | 0.00726 µg/L |
| Outfall 020 | 0.02474 µg/L | 0.02474 µg/L |
| Outfall 028/030 | 0.00334 µg/L | 0.00361 µg/L |
| Outfall 034 | 0.00304 µg/L | 0.00304 µg/L |

*ACTIONS TO ACHIEVE COMPLIANCE – CHEMICAL-SPECIFIC WQBELS*

US Steel will need to take actions to achieve compliance with the water quality-based effluent limits presented above. Though exact actions have not been identified, due to the source and nature of the constituents listed above [except BaP at Outfall 005], end-of-pipe treatment will be required.[1] That is, these are not constituents that are readily identifiable to controllable iron and steel process sources [except BaP at Outfall 005]. For BaP at Outfall 005, further treatment at Outfall 501 would be required.

The identification, evaluation, engineering design, procurement, construction, modification of permits to allow construction and start-up of new end-of-pipe treatment [or for BaP Outfall 501] facilities that could bring these outfalls into compliance with the final discharge limits will take five (5) years. An example of activities that occur in support of engineering, installing, and starting up additional controls to assure consistent compliance with daily maximum and monthly average concentration and mass limits is:

| | |
|---|---|
| 0-11 Months: | Where necessary gather more wastewater characterization data and Conduct treatability studies on technologies |
| 12-18 Months: | Preliminary design of effective technologies |
| 18-24 Months: | Considering multi-media impacts, operability, reliability, and cost, select preferred technology and begin process of approvals |
| 25-37 Months: | Detailed design of selected technology and final approvals of projects |
| 37-39 Months: | Wastewater construction permit application and/or air permit modification |
| 40 Month: | With approval of these permits, apply for NPDES Permit Modification |

[1] In the case of mercury, it does not appear, based on currently available control methods, that consistent compliance with the final water quality-based limits can be achieved, even after end-of-pipe treatment. Therefore, it will be necessary for US Steel to apply for a variance. The variance process, including implementation of minimization measures, is expected to take approximately five years.

| | |
|---|---|
| 41 Month: | Procurement activities |
| 44 Month: | Construction activities |
| 55 Month: | NPDES Permit Modification in effect |
| 56 Month: | Start-up of engineering controls |
| 60 Month: | Final Limits in effect |

*ASSESSMENT OF COMPLIANCE – OTHER WQBELS*

Temperature for 100 ft Downstream of Outfall 005, River Monitoring Point 220, River Monitoring Point 230 and Continuous Temperature Monitoring

US Steel cannot comply with temperature limits (1% over standard and not-to-exceed standard+3°F) based on the limited data available at these monitoring locations. Of most concern for compliance is the temperature limits for October through March. Based on the data available at these monitoring locations, temperature data on the outfalls, and temperature data for the intakes, engineering options could involve either end-of-pipe treatment or novel in-River technologies to reduce temperature. In addition, as continuous monitoring equipment is currently not installed at Outfall 037, 039, 100 ft downstream of Outfall 005, River Monitoring Point 220, and River Monitoring Point 230, a one-year period is allowed to select, procure, install, calibrate, and start-up the equipment. Based on installing continuous temperature monitoring devices at other locations, this one-year time period is appropriate. It should be noted that temperature will be monitored at the specified locations as grab samples.

Any end-of-pipe engineering or in-River technology to reduce temperature will require 5-years to design, engineer, procure, construct, and start-up. An example of activities that occur in support of engineering, installing, and starting up temperature controls to assure consistent compliance with the temperature limits at the three monitoring locations is:

| | |
|---|---|
| 0-24 Months: | Gather more temperature data, particularly needed for October to March |
| 12-24 Months: | Develop temperature model to predict impact of temperature control technologies given intake, climate, and thermal load |
| 12-24 Months: | Conduct temperature 'treatability' studies on technologies (as needed) |
| 22-28 Months: | Preliminary design of effective technologies |
| 28-32 Months: | Considering multi-media impacts, operability, reliability, and cost, select preferred technology and begin process of approvals |
| 30-39 Months: | Detailed design of selected technology and final approvals of projects |
| 37-40 Months: | Wastewater construction permit application and/or air permit modification |
| 40 Month: | With approval of these permits, apply for NPDES Permit Modification |
| 41 Month: | Procurement activities |
| 44 Month: | Construction activities |
| 55 Month: | NPDES Permit Modification in effect |
| 56 Month: | Start-up of engineering controls |
| 60 Month: | Final Limits in effect |

Chronic WET for Outfalls 005 and 034

US Steel cannot comply with chronic WET limits based on the limited data available for Outfalls 005 and 034. There are no current chronic WET limits for Outfall 005 and Outfall 034, but

monitoring was required. The draft final WET limit for Outfall 005 is 1 TUc and for Outfall 034 is 3.3 TUc. From data generated by US Steel and provided during the Permit Renewal process, the projected effluent quality for chronic WET is 18.4 TUc for Outfall 005 and 17.7 TUc for Outfall 034 as presented in Attachment IV Table 15.

It is anticipated that there needs to be identification of toxicants causing the projected effluent quality to be above chronic WET limits (TIE), evaluation of effective methods to reduce toxicity (TRE), followed by treatment technology identification to achieve toxicity reduction, engineering design for technology, procurement, construction, modification of permits to allow construction and start-up of new treatment. The data generation, TIE/TRE, engineering to reduce toxicity to chronic WET limits will require 5-years. An example of activities that occur in support of a TIE/TRE, engineering, installing, and starting up temperature controls to assure consistent compliance with the temperature limits at the three monitoring locations is:

| | |
|---|---|
| 0-12 Months: | Data generation, TIE |
| 15 Months: | Submittal of TRE Plan |
| 16-47 Months: | Conduct TRE Plan |
| 48 Months: | Completion of TRE Plan and Submit NPDES Permit Modification |
| 49-58 Months: | Conversion of temporary treatment to permanent treatment |
| 59 Month: | NPDES Permit Modification in effect |
| 60 Month: | NPDES Permit expires; Final Limits in effect |

## VI. Antidegradation

EPA indicated that it was not clear whether Indiana's antidegradation requirements were satisfied for increased zinc limits at internal Outfall 603, as wall as increased limits for total recoverable chromium, and new limits for cadmium, copper, nickel, silver, total cyanide, total toxic organics, and hexavalent chromium at internal Outfall 604. These limits are consistent with Indiana's antidegradation policy.

The antidegradation policy applicable to high quality waters, including the Grand Calumet River, is contained in 327 IAC 5-2-11.3. That rule provides generally that:

> Controls shall be established as necessary on point and nonpoint sources of pollutants to ensure that the criteria applicable to the designated use are achieved in the water and that any designated use of a downstream water is protected.

327 IAC 5-2-11.3(a).

The limits contained in the permit ensure that the criteria applicable to the designed use are achieved in the Grand Calumet River. These criteria are implemented in the permit through the RPE process, and establishment of appropriate WQBELs where necessary at external outfalls.

The antidegradation policy does not apply to internal outfalls, which are meant to be internal monitoring points solely for the purpose of assessing compliance with technology-based effluent limits. Such internal outfalls cannot be considered point sources from which pollutants are discharged to waters of the state, so fall outside the scope of the antidegradation rules. *See* 327 IAC 5-1.5-40(a) ("point source" is a conveyance "from which pollutants are or may be discharged"); 327 IAC 5-1.5-10 ("discharge" means "discharge of pollutant"); 327 IAC 5-1.5-11 ("discharge of pollutant" means discharge "into any waters of the state"). Therefore, increased and new limits at internal compliance

points do not trigger the need for an antidegradation review.

Even if limits at internal compliance points were interpreted as falling within the scope of Indiana's antidegradation policy, these limits would not violate that policy. Actions that result in a "significant lowering of water quality" are prohibited in absence of the required demonstration. 327 IAC 5-2-11.3(b). A "significant lowering" occurs when:

> There is a new or increased permit limit for a substance that is not a BCC from any existing or new facility, either point source or nonpoint source for which there is a permit or reviewable action, as a result of any activity, and the new or increased permit limit will result in both of the following:
>
> (i) A calculated increase (calculated decrease for dissolved oxygen) in the ambient concentration of the substance outside of the designated mixing zone or volume, where applicable, in the receiving waterbody.
>
> (ii) A lowering of water quality that is greater than a de minimis lowering of water quality.

327 IAC 5-2-11.3(b)(1)(B).

No "significant lowering" will result from the new or increased limits at internal Outfalls 603 and 604. As noted above, the limits in question are not at point sources to the receiving water, but instead at internal compliance points only. The wastestreams from these internal compliance points receive additional treatment before actual discharge and are appropriately regulated for water quality purposes at the external outfalls to the Grand Calumet River. Further, the new or increased internal limits will result in no calculated increase in ambient concentrations in the Grand Calumet River outside the applicable mixing zone. Because there is no "significant lowering" of water quality, the antidegradation policy (if applicable) is satisfied. This reasoning should be added to the fact sheet.

## VII. Cooling Water Intake Structures

EPA requested that IDEM include an explanation of its case-by-case best professional judgment concerning the technology used to minimize the adverse environmental impact associated with existing cooling water intake structures. USS has similarly requested that IDEM indicate in the permit that the regulatory requirements have been satisfied through submission of the Thermal Discharge Demonstration attached to the USS draft permit comments as Attachment 3. That demonstration included impingement and entrainment studies on its intake structures. Conditions at the intake structures have not significantly changed since that demonstration was submitted, so it should be considered representative of current conditions at the facility. USS has recommended that the following language be included in Part III.C. of the draft permit:

> Water intakes shall be designed and located to minimize entrainment and damage to desirable organisms. Requirements may vary depending upon local conditions, but, in general, intakes shall have minimum water velocity and shall not be located in spawning or nursery areas of important fishes. Water velocity at screens and other exclusion devices shall also be at a minimum. **The permittee has demonstrated, in accordance with Section 316(b) of the federal Clean Water Act, that**

**its intake structures are acceptable to meet these conditions, which are based on 327 IAC 2-1.5-8(c)(4)(D)(vi).**

INDIANA UNIVERSITY

SCHOOL OF PUBLIC AND ENVIRONMENTAL AFFAIRS

Honorable Mitchell E. Daniels, Jr., Governor
Office of the Governor
200 W. Washington St., Rm. 206
Indianapolis, IN 46204

Re: Review of BP-Whiting Refinery's permit to discharge to Lake Michigan

Dear Governor Daniels:

You have asked for a review of the wastewater permit issued by IDEM in June 2007 to British Petroleum's (BP) Whiting Refinery and for: (1) an assessment of whether it was issued in compliance with applicable state and federal laws, (2) an evaluation as to the potential of the permitted discharge to adversely affect Lake Michigan's quality and use as a source of drinking water, recreation, and aquatic life, and (3) an assessment of whether the existing laws are sufficiently protective of the Great Lakes system.

Pursuant to this charge, I have, among other things: (1) reviewed the publicly available documents concerning the permit and its issuance as well as a wide range of other materials; (2) met with IDEM and EPA officials involved in the processing and review of the permit application; (3) met with representatives of several public interest groups who are active in Great Lakes issues and talked with representatives of several industry associations whose focus is development in the Great Lakes states; (4) met with representatives of BP; (5) reviewed press reports and other documents to identify issues that have been raised by others concerning the permit; (6) consulted with Dr. Jeffery White, an environmental scientist/engineer in the Indiana University School of Public Affairs whose expertise is in water chemistry and wastewater technology; and (7) consulted with several former senior EPA officials to ascertain their judgments as well.

In conducting the review, I have focused on what I believe to be the most important steps in the process and on the most critical judgments IDEM and EPA made in the course of approving/issuing the permit—as well as on the issues that have been raised by persons critical of the permit. My goal in submitting these findings and recommendations to you in the attached report is to present them in a succinct manner that provides you the essential context and rationale for those findings and recommendations.

At the time I took on the assignment and read published accounts of the controversy, I thought I would be reviewing an epic environmental decision that pitted the nation's need for a reliable source of petroleum products against the well-being of a national treasure, Lake Michigan. After working methodically through the matter, what I found was that this was, in most respects, a very straightforward permitting action undertaken in a regulatory

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47405-1701

Fax: 812-855-7802

regime where Indiana is in some respects actually more protective of Lake Michigan than adjoining states.

The controversy was fostered, in part, by some initial press reports that mischaracterized the wastewater authorized to be discharged as "sludge." At the core of the controversy are some gaps and areas that lack needed clarity in the Indiana regulations for Lake Michigan that implement a concept known as antidegradation. This concept involves the question of when, and the extent to which, new or increased discharges of pollutants will be permitted so long as the discharge will meet legal requirements that protect the quality of the receiving water. The public, the regulated community, and the regulators have different perceptions on what the antidegradation policy is for Lake Michigan and the mechanisms by which it is, or should be, implemented.

These competing perspectives collided in the instant matter because the regulatory requirements were not as clear as they need to be to serve the legitimate interests of the regulated community, the regulators, and the public. The regulated entity (BP) thought it had a legally issued permit that met the explicit legal requirements and could be relied upon as the company proceeded with the modification of its facility. The regulator believed that it had issued a legally and technically sound permit—and is unsure of how to deal with what it views as requests for actions outside the current regulatory construct. Many in the public, however, do not understand why an increase was allowed; they believe the Indiana antidegradation process is opaque and the apparent legal standards at odds with their view of antidegradation--and they view with considerable suspicion the asserted basis for allowing the increased discharge.

The most significant findings from my review are:

- The permitting process for the BP-Whiting refinery that was implemented by IDEM complied with existing regulations and the permit complies with the explicit requirements of state and federal law. If the discharges from the facility are limited to those in the permit, the diffuser works as designed, and the other assumed conditions hold, the wastewater discharge would not be expected to cause a violation of water quality standards or interfere with designated uses in Lake Michigan (including full body contact recreation such as swimming, maintaining the aquatic community, and drinking water supply).

- The limitations in the BP permit are as demanding, and in several instances much more restrictive than, those issued by adjoining states to refineries. The limits on ammonia are much more restrictive, and the total suspended solids (TSS) limits more restrictive, than those in the permit for the most comparable refinery on the Great Lakes, which recently was allowed to increase

the discharge of those pollutants as it increased its utilization of extra-heavy Canadian crude feedstock.

- EPA reconfirmed that it considers Indiana's antidegradation regulations to be in compliance with EPA's Great Lakes Water Quality Initiative Antidegradation Policy. In fact, with a flat ban on new or increased discharges of bioaccumulative chemicals of concern (BCCs) to Lake Michigan resulting from a deliberate action by a permitee, Indiana is more protective of the Lake than the adjoining states. Indiana also has designated all of its waters in Lake Michigan as an "outstanding state resource water" deserving of special protection.

- A number of circumstances unique to this particular re-permitting illuminated certain gaps and a lack of desired clarity in the Indiana antidegradation regulations for waters of the Great Lakes system. For example, the regulations do not spell out when a permit applicant seeking to increase a discharge to Lake Michigan must submit an antidegradation demonstration, what the content of that demonstration must include, and the standard by which a decision as to an increase will be made. The BP permit was the first permit that IDEM issued under these regulations. Although IDEM, to its credit, sought to compensate for those shortcomings, there was not a clear understanding as to (1) what level of increased discharge would be considered to constitute a significant lowering of water quality and (2) what information BP was to submit. Consequently, the information ultimately submitted on the record by BP fell short of what IDEM initially requested and ideally needed to make a decision as to whether, and to what extent, the increases should be allowed. As a result, the determination that the increased discharges are "necessary" lacked the factual support in the public record and a clear articulation of the legal standards by which the decision was to be made; both of which are needed in order for the decision to be seen as credible by the public.

- Indiana should clarify its antidegradation regulations for Lake Michigan to make them easier for permit applicants and the public to understand and for the agency to apply. Specifically, the regulations should clearly spell out: (1) when an applicant seeking permission for an increase in its discharge to the Lake must submit an antidegradation demonstration; (2) the required content for such a demonstration; (3) the legal standard by which the adequacy of the demonstration will be evaluated and any increase allowed; and (4) the process by which the public can comment on the demonstration, ideally before the agency makes its decision concerning it in a draft permit.

- The initial press reports that mischaracterized some of the material BP is authorized to discharge as "sludge" created a misconception in the minds of many members of the public and public officials that does not accord with the actual facts in this case. The treated wastewater that IDEM has authorized BP to discharge is not industrial sludge (the material that is removed from the process water by the waste treatment process)—and BP could not legally be authorized to discharge such material into the Lake, nor could it put it on land in a way that the material ultimately would find its way into the water. The wastewater discharged to Lake Michigan does contain very small quantities of materials that are not removed in the wastewater treatment process. To make clear what the discharge to the Lake resembles I would note that the amount of ammonia authorized to be discharged is the equivalent of one *drop* (from an eyedropper) of ammonia in a pint of pure water. The amount of TSS (small discrete particles that remain suspended in the wastewater and do not settle out or are not filtered out in the treatment process) is the equivalent of 10 *grains* of sand in a pint of pure water.

I also have identified a number of systemic improvements that EPA and the Great Lakes states might consider and have set them out in the Recommendations section of the attached report.

Finally, I would be remiss if I did not pass along several general observations. First, knowledgeable observers in both the environmental and business communities gave IDEM and its commissioner, Tom Easterly, credit for cutting the backlog of expired permits and for their efforts to engage the public early in the permit process. The comments critical of the BP permit matter were focused primarily on the need to improve the process for implementing the antidegradation policy in the Great Lakes and to make the process and decisions more transparent—and thus more likely to be perceived, and therefore accepted, by the public as reasonable.

Second, this controversy did not take the form of "I do not want a refinery in my backyard—close it down." Rather, I found that those interested in the well-being of Lake Michigan understand the importance of having a reliable source of petroleum products in the Midwest and want to be assured that BP is doing what it reasonably could—and should--do as it undertakes this expansion/conversion to be a good neighbor and to avoid or at least minimize potential adverse effects on a treasured resource.

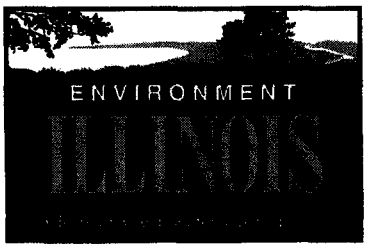
By modifying the regulations to address the shortcomings that I identified, Indiana can readily provide a more transparent process with clear requirements for making antidegradation decisions regarding the Great Lakes

so the people of this state, and other states, concerned about the quality of the Great Lakes are more likely to view permit actions as reasonable.

I would be happy to respond to questions that you or others may have about the review and its findings.

Sincerely yours,

A. James Barnes
Professor of Public and Environmental Affairs and
Adjunct Professor of Law

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December 11, 2007

Ms. Mary A Gade
Regional Administrator
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604

**Regarding: U.S. EPA Objections to Draft Renewal NPDES Permit for U.S Steel-Gary Works (NPDES Permit No. IN0000281)**

Dear Ms. Gade,

My name is Max Muller, and I am a policy advocate at Environment Illinois, a Chicago-based, state-wide, advocacy organization, which works to protect clean air, clean water and open spaces in Illinois and—since water and air naturally flow across state lines—throughout the region. I submit this testimony on behalf of my organization and our 20,000 citizen members.

Environment Illinois is one of the organizations that requested today's hearing in response to U.S. Environmental Protection Agency's (EPA) objections to Indiana Department of Environmental Management's (IDEM) draft pollution permit for U.S. Steel-Gary Works. We thank EPA for calling the hearing and for its objections to the draft permit, which fails to meet numerous Clean Water Act requirements and thereby threatens the health of the Calumet River and our shared Lake Michigan.

Environment Illinois and other groups have advocated years for the protection and restoration of the unparalleled national treasure that is Lake Michigan and the entire Great Lakes system. Far more than just a source of drinking water, the Great Lakes provide for our economy as well as our memories and the enjoyment of our lives. But as vast as they are, scientists agree that Lake Michigan and the rest of the Great Lakes are exhibiting symptoms of extreme distress from numerous toxic contaminants, invasive species, nutrient loading, runoff pollution, and unrestricted water withdrawals. Citing precipitous drops in numerous species, some warn that the Great Lakes system may be verging on ecological collapse.

Fortunately, we have the Clean Water Act, which, when fully implemented and enforced, gives us powerful policy tools that *should* be capable of largely addressing toxic industrial pollution like U.S. Steel's. These tools include the National Pollution Discharge Elimination System (NPDES), which prohibits discharge without a permit. The law gives us Technology-Based Effluent Limits, which are meant to ensure that polluters make use of available pollution control technologies, and Water Quality Based Effluent Limits (WQBELs) which serve as a bottom line, ensuring that pollution levels

are low enough to meet water quality standards protective of basic uses like fishing and swimming. The Act and its implementing rules also include "anti-backsliding" and "anti-degradation" provisions to ensure that once clean, our waters stay that way.

But the Clean Water Act can only protect our waters if we make full use of the tools it provides. When Congress passed the Act in 1972—in large part due to toxic dumping that had ravaged the Great Lakes—it set the goals of eliminating the discharge of pollutants into waterways and making all U.S. waters safe for basic uses like fishing and swimming. But thirty-five years later, in both Illinois and Indiana, more than 40% of surveyed rivers and 90% of surveyed lakes are ranked "impaired" for one or more basic uses.

Rigorous application of the Clean Water Act is critical to the health and viability of the Great Lakes. Unfortunately, U.S. Steel's draft permit is a an example of the failings in implementation and enforcement of the Act that have contributed to it falling short of its worthy founding goals. U.S. EPA identified many of the permit's failings in its October 1 and October 16, 2007 objection letters to IDEM. We agree with those objections, which, paraphrased here, include:

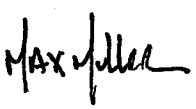
- The draft permit gives U.S. Steel five year compliance schedules—in other words, passes to continue polluting for the life of the permit—for cyanide, copper, zinc, ammonia, and mercury: pollutants which are detrimental to water quality and the people and wildlife dependent on the Great Lakes. IDEM failed to require U.S. Steel to explain why it needs this additional time, which is in addition to the ten years that have already passed since Indiana adopted standards for those chemicals in 1997;
- Allows U.S. Steel to delay for three years its compliance with some wastewater temperature requirements and to delay for one year it's compliance with continuous temperature monitoring. Again, these delays are allowed without explanation for why they are necessary;
- Allows U.S. Steel to increase pollution of zinc and recoverable chromium above the limits of its former, 1994-issued permit. Under the Clean Water Act, such increases should be prohibited without an Antidegradation review demonstrating why U.S. Steel is unable to maintain its current limits, and which should be reviewed by independent evaluators;
- Fails to include appropriate Water Quality Based Effluent Limits for several pollutants for which they are necessary due to IDEM's conclusion that they have the potential to contribute to an exceedance of applicable water quality standards;
- Fails to include appropriate Technology Based Effluent Limits for copper, lead, and zinc, even though IDEM's fact sheet accompanying the permit listed the Technology Based Limits for these pollutants that the agency deemed appropriate; and
- Contains no requirement that the cooling water intake structures reflect best available technology for minimizing adverse environmental impacts.

Our support of these objections is more thoroughly document in the letter submitted on December 8th by Kim Ferraro, Executive Director of the Leaf Foundation, on behalf of Environment Illinois and other public interest organizations. That letter, as well as today's testimony and earlier comments by Anne Alexander of the Natural Resources Defense Council, also describes numerous additional ways in which the draft permit fails to comply with the Clean Water Act including:

- The permit fails to include Water Quality Based Effluent Limits for other pollutants which already impair the Calumet River, including ammonia, cyanide, oil and grease, and total suspended solids;
- Fails to include other Technology Based Effluent Limits for many pollutants—such as arsenic, hexavalent chromium, cyanide, manganese, aromatic hydrocarbons, and nitrate compounds—which U.S. Steel is known to be discharging;
- Even if the fact sheet's Technology Based Effluent limit for zinc were in the permit, it would still actually represent an impermissible backsliding from the limit in U.S. Steel's former permit. Additionally, the fact sheet's Technology Based Limits for copper and zinc are insufficient to meet water quality standards;
- Allows increased cyanide, oil and grease, again, without the necessary Antidegradation review, and eliminates entirely limits on benzene and fluoride and ammonia at some outfalls. Also weakens and eliminates limits on whole effluent toxicity;
- Fails to appropriately regulate stormwater discharge, which contains unknown quantities of pollution;
- Fails to require treatment of highly contaminated landfill leachate;
- Fails to address the large discrepancies in the reported masses of U.S. Steel's cyanide and mercury pollution: In the U.S. Toxics Release Inventory, U.S. Steel reported discharges of these toxics that are 13 and 40 times larger, respectively, than the masses derived from IDEM's "reasonable potential" analysis, based on which IDEM drafted the permit;
- Substantially weakens U.S. Steel's pollution monitoring requirements, which are necessary to reliably assess U.S. Steel's compliance; and
- Fails to consider the impaired watershed status of the Grand Calumet River, which is identified on the Clean Water Act 303(d) listing for impaired water quality for ammonia, cyanide, oil and grease, mercury and impaired biological communities. The river and near-shore Lake Michigan are listed of the Great Lakes 43 Areas of Concern, for which they are impaired for all 14 beneficial uses, with contaminated sediments and an ecology so degraded that beaches close, the fish get tumors, and the water has an odor.

With so much left to do to restore the Great Lakes, such poor state enforcement of the Clean Water Act is the LAST thing we need. Environment Illinois supports U.S. EPA's objections to U.S. Steel's permit, and we further believe it critical for U.S. EPA's to modify its objections to include all of these additional failures, which are more thoroughly explained in Kim Ferraro's and Anne Alexander's testimony. We urge you to ensure the final permit's full compliance with the Clean Water Act and prevent unnecessary and unlawful harm to the Calumet River and Lake Michigan.

Sincerely,



Max Muller
Advocate
Environment Illinois

[redacted]

**From:** [redacted]
**To:**
**Sent:** Tuesday, November 13, 2007 4:31 PM
**Subject:** Steel

The next industrial and financial revolution involving Natural Capitalism is already underway where the earth's natural resources are truly valued in business practices for sustainable competitive advantage and profits.

Unfortunately, some have yet to realize this and the longer it takes for them to wake up the more painful it becomes both environmentally and economically.

The technology is available to eliminate anywhere from 24 to 80 percent or more of environmental contaminates of concern from the basic integrated Iron and Steelmaking processes along with: two thirds initial capital investment, while saving nearly twenty percent or more on operating costs, with additional energy savings, and making Steelworker jobs more competitive and secure in the process.

Example: Kobe Steel and it's subsidiary Midrex which produce Direct reduced Iron and Steel. Proven to: decrease investment costs by up to 35 percent or more, decrease production costs by up to 19 percent or more, decrease and/or eliminate pollution, reduce energy consumption, and is also suitable for recycling or cleanup almost all Steel Mill process wastes and legacy wastes.

This must be done now for a more efficient, competitive, and profitable steel industry; improved environmental quality; more secure jobs; conservation of resources and energy; and maintenance of domestic steel production for national security reasons.

See Also:

2006 World Direct Reduction Statistics
( http://www.midrex.com/uploads/documents/MXStatsbook20061.pdf )

Direct Reduction Iron Making
( http://www.kobelco.co.jp/p108/dri/indexe.htm )

Direct Reduction Iron & Steelmaking
( http://www.midrex.com/ )

Clean Coal Technologies in Japan
( http://www.nedo.go.jp/sekitan/cct/eng_pdf/2_2a3.pdf )

[redacted]

**From:** [redacted]
**To:**
**Sent:** Sunday, September 30, 2007 9:12 PM
**Subject:** USS NPDES Permit

Final Comments [redacted] - 9/26/2007
Delivered via Personal Service to IDEM on 9/28/07.

I would like to thank you for this opportunity to comment.

About Jobs
I would like to preface my comments by attempting to end the common urban myth that environmental regulation cost Jobs. As I understand it, the Commissioner of the Indiana Department of Environmental Management (IDEM) Thomas Easterly is very concerned about jobs.

I share these same concerns. Let me clearly state that I want to see good paying manufacturing jobs like those at Gary Works stay in Northwest Indiana.

But let's look at what happens when environmental regulations are relaxed or circumvented by deregulation and/or granting of variances. Germany verses the United States is one good example and there are numerous others.

Since the 1980's the United States has significantly relaxed its environmental standards. One result is that as much as 70 percent of the air-pollution control equipment sold domestically is now produced by foreign companies.

In contrast, Germany during this same time period strengthening its environmental standards to some of the world's most stringent. This resulted in development of a wide range of new production processes and innovative technologies that are marketed globally. So now Germany has surpassed the United States as the largest exporter of environmental goods and services.

Germany created jobs by strengthening its environmental standards. How many jobs have been lost in the United States due to the weakening of our environmental standards? How many steelworker, manufacturing, and technical service jobs could have been created if we had followed Germany's example? It's not too late to still do so! Indiana is called the "Rust Belt" when do we become the Belt of Innovation?

Look at the tens of thousands of jobs already lost at Gary Works alone! When companies fail to invest capitol and modernize their facilities their ability to compete in a global marketplace is compromised. Look at Japan's steel industry, where facilities are built or upgraded every 20 years to the best cutting-edge technology available to make their facilities some of the most efficient and competitive in the world.

Contrast that to United States Steel Corporation where they are still using some "day-one" parts of the facility constructed from 1906 on.

Since 1908, Gary Works has produced over 435 million tons of iron and steel, more than any other plant in the world. I would submit to you that continuation of relaxing standards, deregulation, and/or granting of variances put those steelworker jobs in jeopardy!

Backsliding on environmental protection simply allows United States Steel Corporation to run Gary Works into the ground until its facility becomes so non-competitive that further job loss will occur and the surrounding communities will only be left with their legacy of pollution and contamination.

Development and implementation of new and innovative technology creates additional jobs that are more secure in a global market due to improved operating efficiency, increased competitiveness, and additional profits from technology transfers.

The myth that environmental protection costs jobs is perpetuated by those who externalize their pollution costs to local communities and society. They fear monger to convince people that it's a choice between the qualities of the environment we must live with vs. having a decent paying job. The truth is that this type of choice is not necessary. We can encourage and require constant improvement and innovation in industry with plain and simple regulations that make common sense, provide certainty, but also secure jobs.

Comments of [redacted] (continued.) - 9/26/2007

The History
The Federal Water Pollution Control Act Amendments of 1972 were significantly amended in 1977 to control 141 priority and/or toxic pollutants and is now known as the Clean Water Act (CWA). The first goal of the CWA states; ".it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985."

We never discuss going towards that goal of Zero Discharge any more! The concept was that if we can put a man on the moon, certainly we can develop innovative technologies, better production processes, and the means to treat and control contaminates in order to eliminate the discharge of pollutants into the navigable waters of the United States.

The purpose of the CWA was to restore the quality of the waters of the United States to protect uses like swimming, fishing, and drinking water sources. Let's look at fishing as an example.

In the Great Lakes system, Lake Michigan has the second highest levels of contaminated fish. I find the fact that we have contaminated fish and advisories on "safe" consumption of fish outrageous. Eating fish is supposed to be healthy not bad for you and your children's long-term health! By the

way, the second Goal of the CWA is; "an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife..."

The Permit
We are here tonight to discuss the United States Steel Corporation, Gary Works' National Pollutant Discharge Elimination System (NPDES) Permit to discharge, at numerous outfall points, into the navigable waters of the Untied States.

First, I would like to emphasize the word ELIMINATION as part of the proposed draft permit. "Eliminate" is defined as: to get rid of, remove, exclude, or take out.

Does the proposed NPDES Permit do everything that it could to encourage and require United States Steel Corporation to eliminate the discharge of pollutants into the navigable waters of the United States?

I would submit to you that the answer is a definite no!

Under the proposed NPDES Permit the United States Steel Corporation will not have to consider making any significant changes or upgrades in their production process which could completely eliminate or significantly reduce sources of pollution.

In the late 1970's the United States Environmental Protection Agency (U.S. EPA) in proposed Effluent Limitations Guidelines and Standards for the Iron and Steel Manufacturing Point Source Category (EPA 440/1-80/024-b, December 1980) identified over 100 priority pollutants present in wastewater in concentrations up to 71,000 mg/l. U.S. EPA proposed regulating 48 toxic and 10 other pollutants.

In the early 2000's U.S. EPA again identified in proposed Effluent Limitations Guidelines and Standards for the Iron and Steel Industry ( EPA 821-B-00-010) 70 pollutants of concern (28 priority pollutants, 4 conventional pollutants, and 38 non-conventional pollutants in waste streams from iron and steel facilities.

EPA evaluated 60 of these pollutants with sufficient data to assess their potential fate and toxicity on the basis of known physical-chemical properties, and aquatic life and human health toxicity data. Most of the 70 pollutants have at least one known toxic effect.

Comments of [redacted] (continued.) - 9/26/2007

The Permit (continued.)
EPA determined that 23 exhibit moderate to highly toxicity to aquatic life, 16 are classified as known or probable human carcinogens, 39 are human systemic toxicants, 23 have drinking water values, and 28 are designated as priority pollutants. In terms of projected partitioning media, 16 of the

evaluated pollutants are moderately to highly volatile (potentially causing risk to exposed populations via inhalation), 25 have a moderate to high potential to bioaccumulate in aquatic biota (potentially accumulating in the food chain and causing increased risk to higher trophic level organisms and to exposed human populations via consumption of fish and shellfish), 18 are moderately to highly adsorptive to solids, and 8 are resistant to biodegradation or are slowly biodegraded."

So we go from concern over 110 pollutants in the 1980's to 70 pollutants in the early 2000's to actually regulating how many in 2007? Only a handful! There is something queer about the proposed NPDES Permit. It is a "don't ask don't tell" document!

First off, a "Report" only requirement in the proposed NPDES Permit does not constitute an effluent limitation. Specific numbers need to be set for every pollutant parameter monitored, reported, and limited under the proposed NPDES Permit.

If you don't require monitoring and reporting of all the potential pollutants known to be present from the various processes in the Gary Works facility there will be no measure of the actual scope of the pollutants present. What doesn't get measured doesn't get addressed! Without measurement under all operating conditions there will be no incentives or efforts to further eliminate the discharge of pollutants into the navigable waters of the United States.

Conspicuously absent from the point source outfalls regulated under the proposed NPDES Permit's monitoring, reporting, and numerical limitation requirements are many general and/or specific indicator parameters for all of the known integrated steel manufacturing pollutants such as:

Specific Conductivity, total Volatile Organic Compounds (VOCs), benzene, polycyclic aromatic hydrocarbons (PAHs), inorganic arsenic compounds, inorganic cadmium compounds, hexavalent chromium compounds, lead, mercury, oxidic, sulphidic and soluble, inorganic nickel compounds, inorganic fluorides, dichloromethane, tetrachloroethylene, 1,1,1-trichloroethane, trichloroethylene, polychlorinated biphenyls, polychlorinated dibenzodioxins (dioxins), and polychlorinated dibenzofurans (furans).

In fact, as proposed many of the numerical limitations in the draft NPDES Permit doesn't even meet third world standards such as the requirements of the World Bank's Guidelines for Effluents from Steel Mills:

Parameter / Maximum Value
pH 6-9
Total Suspended Solids 50 mg/l
Oil and grease 10 mg/l
Cadmium 0.1 mg/l
Chromium Hexavalent 0.1 mg/l , Total 0.5 mg/l
Copper 0.5 mg/l
Lead 0.1 mg/l

Nickel 0.5 mg/l
Temperature Increase ? 3°C.

The allowance under the proposed NPDES Permit of Mass Balance calculations based upon pre-designated Flow rates instead of actual measured Flow rate doesn't produce representative Reporting of what concentrations of pollutants are actually being discharged.

Comments of [redacted] (continued.) - 9/26/2007

The Permit (continued.)
The allowance under the proposed NPDES Permit of mixing of waste streams, lack of pretreatment requirements in internal outfalls or prior to mixing points, dilution by other wastewater and/or so-called non-contact process waters, and use of Mixing Zones does not meet the Prevention of Significant Deterioration requirements of the CWA. The solution to pollution is not dilution!

No consideration of multi-media pollutants and overall impacts are made under the proposed NPDES Permit which could significantly eliminate the discharge of pollutants into the navigable waters of the United States.

Groundwater discharges and/or infiltration that become Point Sources are not considered under the proposed NPDES Permit with respect to known groundwater contamination at Gary Works. No discharge limitations are proposed for these discharges of pollutants into the navigable waters of the United States.

The Storm water portions of the proposed NPDES Permit fail to require monitoring and reporting of a host of the numerous known pollutants that are present in the groundwater contamination at Gary Works.

The potential problem with ground water infiltration is that the storm water system could quickly change from storm water to water contaminated by hazardous material due to known levels of groundwater contaminates. Monitoring and numerical limitations at various sumps and lift stations, not reliance upon dilution, for these pollutants is the only way to ensure that this does not take place.

So-called "Non-Contact Process Water" should be monitored daily under the proposed NPDES Permit for all of the potential pollutants known to be present from the various processes they are associated with in the Gary Works facility prior to mixing with other waste streams.

To illustrate why this is important for each process source of "Non-Contact Process Water" I will use an example of "Non-Contact Water" Coolers for Cokemaking process wastewater. Just like the Exxon Valdez these Coolers are single hulled with no secondary containment. And failure of Coolers is a common occurrence especially given the age of Gary Works.

So, under the proposed NPDES Permit the consideration of "Non-Contact

Process Water" as something that is not subject to the same potential contamination as highly polluted process wastewaters is a false assumption and fails to require adequate monitoring, reporting, and establish numerical limitations that eliminate the discharge of pollutants into the navigable waters of the United States.

Likewise the proposed NPDES Permit and fails to require adequate monitoring, reporting, and establish numerical limitations for potential pollutants which are deliberately added as treatment chemicals or indirectly added in processes such as (anticorrosion, biocides, oxygen strippers, antifoaming agents, flocculants, surfactants, degreasers, solvents, etc.) from various point sources of wastewater like Blow-Down, Boiler Waters, "Non-Contact", Cooling, and other miscellaneous sources of water and/or wastewater discharge.

Given that IDEM's permitting process has languished for so long concerning the United States Steel Corporation, Gary Works' NPDES Permit, I see no reason not to go back and start over with a comprehensive analysis of the pollutants discharged into the navigable waters of the United States from this facility. The comprehensive analysis must include real consideration of: actual Pollution Prevention; reduction of multi-media pollution impacts; actual elimination of pollution at the source through production process reconfiguration or replacement such as direct iron and/or steelmaking; other innovative technologies; greater than 90 percent direct reuse and recycling of wastewaters to reduce discharge flow rates; and final adequate treatment of pollutants to meet the requirements and goals of the CWA and anti-degradation requirements in order to achieve Prevention of Significant Deterioration of the navigable waters of the United States.

Additional Comments of [redacted] - 9/28/2007

The Permit (continued.)
The Grand Calumet River has been listed as impaired for 14 beneficial uses including:

a.. Restrictions on fish and wildlife consumption
b.. Eutrophication or undesirable algae
c.. Tainting of fish and wildlife flavor
d.. Restrictions on drinking water consumption, or taste and odor
e.. Degradation of fish and wildlife populations
f.. Beach closings
g.. Fish tumors or other deformities
h.. Degradation of aesthetics
i.. Bird or animal deformities or reproduction problems
j.. Added costs to agriculture or industry
k.. Degradation of benthos
l.. Degradation of phytoplankton and zooplankton populations
m.. Restriction on dredging activities
n.. Loss of fish and wildlife habitat

In addition, EPA regulations prohibit issuance of an NPDES permit that would

result in an elimination of an existing use of a water of the U.S.

The proposed NPDES Permit fails to set adequate technology-based numerical limits to necessary to meet the requirements of the CWA and/or which support and meet the Designated Uses, U.S. EPA's Antidegradation Policies, and Prevention of Significant Deterioration of the navigable waters of the United States.

The proposed NPDES Permit fails to consider non-point and/or when non-point sources become point sources in establishing numerical limitations for discharges with respect to Total Maximum Daily Loads (TMDL), Wasteload Allocations (WLA) and Load Allocations (LA) in meeting the CWA requirements.

IDEM has not adequately characterized all of the pollutants present in wastewaters from United States Steel Corporation, Gary Works' processes in order to determine what is potentially and/or actually present in final discharges regulated under the proposed NPDES Permit. Characterization of potential and/or actual pollutants present must be done at the point of generation of each specific wastewater source prior to any mixing and/or dilution from other waste streams or wastewaters. Dilution by large quantities of less polluted waters and/or so-called "Non-Contact" water to levels below detection and/or levels below regulatory significance prior sampling or discharge does not provide an adequate characterization of what potential and/or actual loading of pollutants the receiving waterbody is impacted by or loaded with.

Final NPDES permit monitoring, reporting, and numerical limitations should be set based upon sound science and technological based determinations which include a complete and comprehensive characterization of the all of the pollutants present in wastewaters from United States Steel Corporation, Gary Works' processes under all levels of historic and potential production and operating conditions.

In addition to IDEM and U.S. EPA having the ability to split-sample wastewater samples to determine compliance and/or additional permit requirements, specific written language for a community monitoring provision should be established under the citizens' enforcement provisions of the CWA under the proposed NPDES Permit.

The State of Indiana should consider providing financial assistance under the Clean Water State Revolving Fund for any new technology and/or process changes required to meet the monitoring and/or discharge limitations under the proposed NPDES Permit.

Additional Comments o[redacted] - 9/28/2007

The Permit (continued.)
When and where feasible the proposed NPDES Permit should require daily and/or continuous sampling and monitoring and reporting especially where indicating parameters such as Specific Conductivity, Turbidity, pH,

Temperature, Dissolved Oxygen, etc. can be used to monitor as indicators of non-compliance, upsets, so-called "Non-Contact water and Storm water integrity and process failures. This can be done for numerous parameters as appropriate and feasible very inexpensively using technology and sampling equipment readily available today and should be required and utilized in meeting the requirements and goals of the CWA under the proposed NPDES Permit.

IDEM should require actual in stream biological criteria and monitoring for the receiving waterbodies and/or watershed in addition to bench scale testing for the toxicity of wastewaters under this permit.

Questions
Under the proposed NPDES Permit how many contaminates, for each category, have been regulated with respect to: Monitoring; Reporting; and established Numerical Limitations?

How many potential and/or actually present contaminates in United States Steel Corporation, Gary Works' process waters and/or wastewaters, for each category, has IDEM identified?

Did IDEM do any sampling or split-sampling in determining potential and/or actually present contaminates in United States Steel Corporation, Gary Works'
process waters and/or wastewaters?
If so, please provide details and results. If not, please provide an explanation why this was not necessary.

How does IDEM justify the limits set under the proposed NPDES Permit with respect to Water Quality Standards and Technology-Based limits including Total Maximum Daily Loads with respect to each of the following:

Total loading to the receiving waterbodies and final fates of pollutants in the watershed;

A Margin of Safety (MOS) including other current and/or future beneficial uses;

Reserve Capacity including other current and/or future sources of pollution in the receiving waterbodies and/or watershed;

Background levels of pollution present in the receiving waterbodies and/or watershed;

Non-point Sources of pollutants present in the receiving waterbodies and/or watershed; and,

Any Individual Wasteload Allocations for Point Sources (WLA) present in the receiving waterbodies and/or watershed?
If the IDEM has not taken into consideration any of the criteria

immediately listed above in setting the discharge limitations, numerical limits,
monitoring, and/or reporting under the proposed NPDES Permit please provide
an explanation why this was not necessary.

Does the IDEM expect the proposed NPDES Permit to require or encourage United States Steel Corporation, Gary Works to undergo any significant production process up-grade(s), reconfiguration(s), and/or replacement(s) or force any technological solutions as a result of any discharge limitations, numerical limits, monitoring, and/or reporting requirements?
If so, please provide details. If not, please provide an explanation why this is not expected.

Did IDEM incorporate all "existing" uses into the Water Quality Standards (WQS) as a "designated" uses under the proposed NPDES Permit?
If so, please provide details. If not, please provide an explanation why this was not done.

Additional Comments of [redacted] 9/28/2007

Questions (continued.)
Why has the IDEM allowed Mixing Zones where some or all Water Quality Standards (WQS) are waived to allow for dilution of pollution?

How does the use of Mixing Zones meet the following:

the requirements and/or goals of the CWA;

support and/or meet the Designated Uses;

U.S. EPA's Antidegradation Policies;

Water Quality Standards and Technology-Based limits including Total Maximum Daily Loads with respect to the receiving waterbodies and/or watershed; and, comply with the Prevention of Significant Deterioration of the navigable waters of the United States?
If the IDEM has not taken into consideration any of the criteria
immediately listed above in setting the discharge limitations, numerical limits,
monitoring, and/or reporting under the proposed NPDES Permit please provide
an explanation why this was not necessary.

Why can't compliance under the proposed NPDES Permit with discharge limitations, numerical limits, monitoring, and/or reporting be accomplished by United States Steel Corporation, Gary Works without the use of Mixing Zones?

Will IDEM require United States Steel Corporation, Gary Works to sample immediately prior to discharge in addition to after the Mixing Zone?
If so, please provide details. If not, please provide an explanation why this was not done.

Has the IDEM taken into consideration any economic or social impacts with respect to the any discharge limitations, numerical limits, monitoring, and/or reporting requirements under the proposed NPDES Permit?

What are the frequency or the recurrence interval components of the Water Quality Standards and Technology-Based limits including Total Maximum Daily Loads with respect to any exceedances discharged into the receiving waterbodies and/or watershed for any of the required discharge limitations, numerical limits, monitoring, and/or reporting requirements under the proposed NPDES Permit?

Is IDEM requiring any insitu and/or in stream Biological criteria or monitoring of the receiving waterbodies and/or watershed as part of the proposed NPDES Permit to determine toxicity impacts and compliance with the requirements and/or goals of the CWA for discharges from United States Steel Corporation, Gary Works?
If so, please provide details. If not, please provide an explanation why this was not done.

Under the proposed NPDES Permit the continued discharge of massive annual tonnage of Suspended Solids is allowed, much of which will settle out in the receiving waterbodies. How does IDEM determine that this is not a defacto violation of Section 404 of the CWA?

How can IDEM justify "Reporting" only discharge limitations instead of specific numerical criteria when it has not completely and comprehensively identified all of the pollutants in waste and wastewater sources?

If the IDEM believes that the pollutant in question is not present why hasn't
IDEM set a numerical limit at or near the detection limit instead of a "Report" only discharge limitation under the proposed NPDES Permit?

Additional Comments of [redacted] 9/28/2007

Conclusion
The State of Indiana and the federal government through U.S. EPA should provide any necessary technical and/or financial assistance to force significant technological and/or production process reconfiguration or replacement in order to eliminate or significantly reduce the discharge of pollutants from United States Steel Corporation, Gary Works in meeting the requirements and goals of the CWA, International Treaties, and the regulations and policies of both U.S. EPA and IDEM.

As much as 80 percent of what we are concerned with here today could be completely eliminated from consideration including the impacts on aquatic life, human health, and beneficial uses by eliminating by-product cokemaking and going to non-recovery cokemaking and direct ironmaking and/or direct steelmaking at the United States Steel Corporation, Gary Works facility.

Under the proposed NPDES Permit this will never be selected as an option of meeting the technology-based limits. No significant production process changes to eliminate pollutants will occur unless the proposed NPDES Permit forces them through stricter discharge limitations.

In fact in attending the Public Meetings for comment on the permit no one that could actually make such a decision was present. We must turn what the regulated community sees as a regulatory burden into an opportunity to move forward, develop and implement new and innovative technologies, with the additional benefit of creating additional jobs that are more secure, improving operating efficiencies, increasing competitiveness, and reaping additional profits from technology transfers. Without the interest, understanding, and involvement of the person(s) that can actually make such decisions at the corporate level none of the above will come to pass.

Unfortunately, many corporations behave like children. They don't like being told what to do. They resist and throw tantrums (job threats, lawsuits, etc.) when they don't get their way.

I submit to you that when a corporation is unable to do the right thing and move forward and invest the necessary capital to reduce pollution, modernize, and make major changes in their production processes that eliminate and/or significantly reduce the discharge of pollutants when better technology is available the sate and federal governments are often the only entities to encourage change.

Unfortunately the proposed NPDES Permit for the United States Steel Corporation, Gary Works facility does not achieve this even though IDEM and U.S. EPA have the authority to set discharge limitations that will meet the requirements and goals of the CWA, International Treaties, and their own regulations and policies while forcing significant technological change for the betterment of all involved.

We can do better and we should!

Sincerely;

[redacted]

Hebron, IN 46341

[redacted]